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Summer 2008

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Headquarters
at St. Elizabeths





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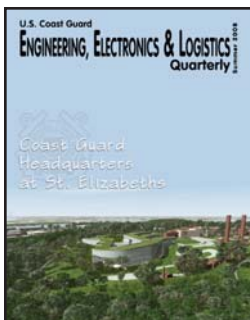
Submissions: Articles should be about 500 words long; however, C4IT, engineering, logistics and environmental specific articles can be up to 2,000 words -- all acronyms must be spelled out when first used. To have your article considered for publication, photo(s) must accompany each article. Articles can be submitted by DHL or other carrier in hard copy and/or in Microsoft Word on a 3.5 disk, CD, or e-mailed electronically. Please submit original photographs and graphics. All slides, photos, graphics and illustrations should be in color where possible. Please include **by-line** when submitting article. Let us know if you want your photos and graphics returned to you. Submit inquiries, letters, articles, and photographs to:

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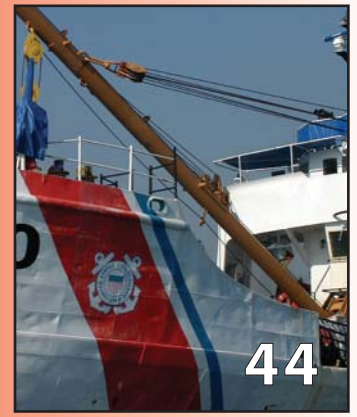
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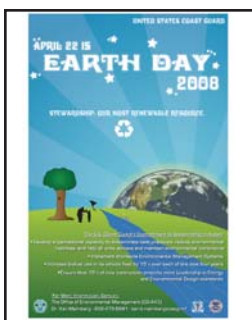


On the Cover: *USCG HQ Concept Sketch (one version) for St. Elizabeths, read about it on page 18.*



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Back Cover: Remembering Earth Day: Coast Guard Earth Day 2008 poster.

From the Assistant Commandant



The Coast Guard continues to aggressively pursue modernization efforts. In a significant first step, the Asset Product Office (APO) has been established in Baltimore and beginning this Summer, we will consolidate the disparate organizations that are supporting our standard boats into one entity, the Standard Boat Product Line. The Product Line will consist of personnel already working to support boats and who are currently located at the APO, Maintenance and Logistics Commands, and Naval Engineering Support Units. There will be no immediate transfer of personnel or change in lines of authority; however, all of these organizations will work together and deliver a single support infrastructure to provide maintenance and logistics for boats.

One of the foundational principles of a strong maintenance and logistics support organization is configuration management. The primary purpose of configuration management is to ensure the documentation used to describe our assets precisely matches the assets themselves. This information is critical in our understanding of how to support the assets. If configuration management data is accurate, support organizations can make the decisions regarding how to best maintain and provision the assets. This translates into better availability and operational capability. For the Standard Boat Product Line to be successful, it will be vitally important that unit commanders take a firm position supporting disciplined configuration management at their units.


While on-scene initiative is a Coast Guard hallmark, it can sometimes have an adverse impact on long-term supportability. We frequently reward our personnel when they succeed without requisite resources. The new Mission Support Organization will take measures to increase support and decrease the need for non-standard practices. As we look to the future, non-standard maintenance, logistics and support practices should become the exception and not the rule. Units may have to make a "field repair" to keep assets operational. However, our robust Mission Support Organization will quickly replace the "field repair" with a permanent repair when the asset is made available to do so.

In order to maintain asset configuration, it is imperative that units do their part. Units must order only approved parts and must report installation to the product

line. Product lines must also be responsible to their customer for configuration management to be effective. Periodically, units will be evaluated by a Logistics Compliance Team. The team will spot check assets to ensure Commanding Officers and Officers in Charge are maintaining the approved configuration of their asset(s).

Maintaining strict configuration management *does not* mean we must stop innovating. In the new Coast Guard business model, requests to deviate from the standard configuration will be made to the asset Configuration Control Board (CCB). The CCB will normally be made up of Headquarters level operations, engineering and safety personnel who will evaluate each request. The request will also be evaluated for feasibility by the asset product line. The CCB will evaluate each request on the basis of safety, operational necessity, logistics necessity and cost effectiveness. Upon evaluation, the CCB may authorize development, installation and evaluation of a prototype. The product line will monitor or may even assist with each prototype. As prototypes move through the evaluation process, the product line may find that the prototype may benefit a small group of assets, or the entire fleet, instead of a single asset.

I will no longer be overseeing the logistics transformation as the Chief Engineer. On 2 July 2008, I will assume duties as Commander, First Coast Guard District, supporting logistic transformation from a field commander's perspective. As we pursue a major cultural shift in how we manage and maintain our assets and shore infrastructure, I am turning over the reins of the Coast Guard's Chief Engineer to the extremely capable hands of Rear Admiral Tom Ostebo. As I depart, I would like to thank each and every member of the Mission Support community. Your tireless efforts transforming the Coast Guard will pay substantial dividends in the future. Thank you for making this tour of duty enjoyable and very professionally rewarding.



Dale G. Gabel RADM, USCG
Assistant Commandant for
Engineering and Logistics

U.S. Coast Guard "Engineer of the Year" for 2008 (Yard)

Commander John Slaughter (center) receives congratulations on his receipt of the U.S. Coast Guard Engineer of the Year Award from Admiral Thad Allen (left), Commandant of the U.S. Coast Guard, and Rear Admiral Dale Gabel (right), Assistant Commandant for Engineering & Logistics, U.S. Coast Guard. The Commander accepted his honors at the National Press Club in Washington, D.C. on February 21, 2008. Commander Slaughter currently serves as Chief, Facilities Management Division at the U.S. Coast Guard Yard in Baltimore, Maryland. (Official USCG photo by PA2 Daniel Bender)

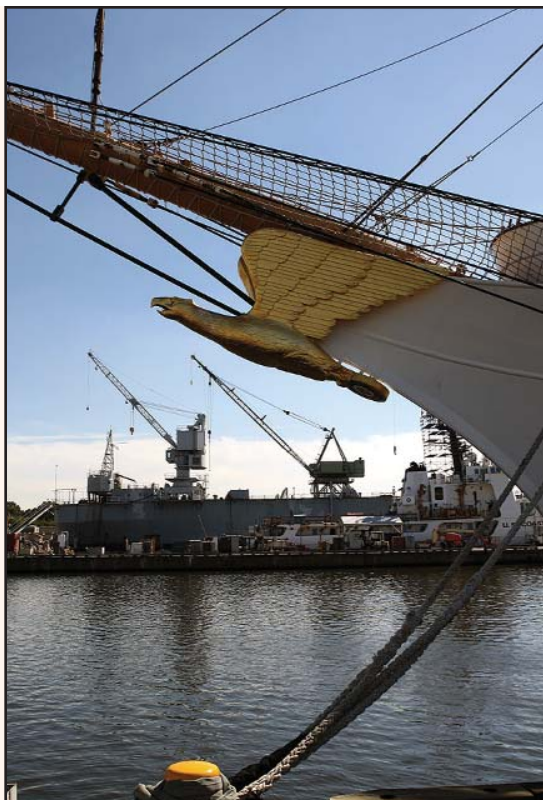


"Fair Winds & Following Seas" (Yard)

The Coast Guard Barque EAGLE departed the Yard on February 2, 2008 for its homeport in New London, Connecticut, after completing a sixteen week availability. Yard tradesmen accomplished their work on America's 72 year old Tall Ship within budget and on time. The scope of work included: removal and inspection of the tail shaft that resulted in the installation of a new shaft; repair of the propeller; overhaul of various sea valves; rudder repairs; anchor windlass overhaul; preservation of the shaft alley that required removal of the ballast plus blasting and painting of the bilges; shell plating repair and replacement; refurbishment of male berthing spaces, and new deck and paint.

The Yard's core expertise in maintaining legacy cutters is a key strategic element of the Coast Guard's ship repair capability, translating directly into "readiness" of the Coast Guard fleet. (Photos courtesy of Bob Schwabik)





U.S. Coast Guard Observes Earth Day (CG-4)

SUBJ: EARTH DAY OBSERVANCES IN THE COAST GUARD

1. AS THE ENVIRONMENTAL EXECUTIVE FOR THE COAST GUARD, I INVITE EVERYONE TO OBSERVE EARTH DAY 2008 BY SHOWING OUR STEWARDSHIP FOR THE MARINE ENVIRONMENT IN WHICH WE PERFORM OUR MISSIONS.
2. EARTH DAY IS CELEBRATED ON 22 APRIL, AND IS AN IDEAL OPPORTUNITY TO REINFORCE THE SPIRIT OF THE COMMANDANTS ENVIRONMENTAL STEWARDSHIP COMMITMENT TO MAKE ENVIRONMENTAL STEWARDSHIP A CORE COMPETENCY.
3. COAST GUARD UNITS AND COMMANDS SHOULD USE THIS OCCASION FOR APPROPRIATE OUTREACH ACTIVITIES AND CELEBRATIONS. SUITABLE TALKING POINTS THAT MAY FIT INTO YOUR OUTREACH EFFORTS INCLUDE HOW OUR MISSIONS HELP PROTECT THE ENVIRONMENT.
4. MY COORDINATOR FOR EARTH DAY IS DR. KEN MALMBERG, (202)475-5691, KEN.B.MALMBERG(AT)USCG.MIL.
5. INTERNET RELEASE AUTHORIZED.
6. J.G. ORNER, DEPUTY ASSISTANT COMMANDANT FOR ENGINEERING AND LOGISTICS, SENDS.

BT

Coast Guard Accepts Delivery of First Missionized HC-130J Maritime Patrol Aircraft



NAVAIR U.S. Marine Corps test pilots began HC-130J functional and flight quality check flights in preparation for delivery to the Coast Guard. Photo courtesy of Lockheed Martin.



Arlington, VA (March 4, 2008) – The Coast Guard accepted delivery of the first missionized HC-130J long range surveillance maritime patrol aircraft. The aircraft's new mission equipment and sensor packages are designed to deliver enhanced search, detection and tracking capabilities to perform maritime search and rescue, maritime law enforcement and homeland security missions.

“With the stroke of a pen, the most capable aircraft in the Coast Guard’s history is now in our inventory,” said CAPT Matthew Sisson, Coast Guard Deepwater aviation program manager, as he signed the acceptance papers on February 29.

Lockheed Martin is currently under contract to deliver three missionized HC-130Js through the Deepwater Program and is on schedule to complete work this month [March]. A second contract is expected in the coming weeks to begin work on the fourth aircraft with follow-on contracts later this year to round out the Coast Guard inventory of six HC-130Js.

“Expectations run high as the fleet prepares to exploit the capabilities of the fully-missionized HC-130J,” said CDR Tim Schang, HC-130J platform manager with the Coast Guard’s Office of Aviation Forces.

The aircraft modifications include installation of a belly-mounted surface search radar, a nose-mounted electro-optical infrared sensor, a flight deck mission operator station and a mission integrated communication system. The mission system installed on the HC-130J is derived from the same software series developed for the mission system pallet on board the HC-144A maritime patrol aircraft concurrently in testing.

“The missionized HC-130J is ideal for multi-tasked operations,” said Rich Lockwood, vice president of Coast Guard Systems at Lockheed Martin. “In addition to its new command and control and surveillance capability, the aircraft retains the full cargo carrying capability that has made the Hercules the most versatile airlift platform worldwide for more than 50 years.” 🌐



CAPT Matthew Sisson, Coast Guard Deepwater aviation program manager, and Bruce Konya, Lockheed Martin HC-130J program manager formally transfer ownership of the first missionized aircraft.

***BERTHOLF* Completes Latest Milestone, Returns from Successful Builders Trials**



BERTHOLF began four days of Builder's Trials on February 8, 2008. Photo courtesy of Northrop Grumman.



CDR Doug Schofield, Executive Officer PMRO Gulf Coast, and Richard Schenk, Northrop Grumman vice president for U.S. Coast Guard programs, discuss testing on the NSC's bridge during trials.

Pascagoula, Miss. (February 15, 2008) – The first National Security Cutter, BERTHOLF (WMSL 750), returned after four days of builder's trials in the Gulf of Mexico. The ship's return to Northrop Grumman Shipbuilding's Pascagoula facility marks the latest milestone for the first NSC, which is nearing completion.

"BERTHOLF's Builder's Trials validated what we have believed for sometime," said Richard Schenk, Northrop Grumman vice president for U.S. Coast Guard programs. "The team has designed and built a ship that has exceeded expectations with respect to performance and operability. We look forward to completing BERTHOLF and delivering a vital asset to the Coast Guard."

During the trials, extensive testing of propulsion, electrical, damage control and combat systems were conducted. This culminated in the successful completion of a four-hour full power trial, standardization trials, as well as 57 mm gun and Close-in Weapon Systems (CIWS) testing.


"When you combine this extremely capable cutter with our high performing crew, you have a recipe for legendary achievement," said CAPT Kelly Hatfield, prospective executive officer, BERTHOLF. "We are building the legend one step at a time. The latest step was taken during builders trials with the successful first ever firing of the 57mm gun from a U.S. ship."

BERTHOLF is the first of eight planned ships in the new class of highly capable, technologically advanced multi-mission cutters being acquired under the Deepwater Program. Northrop Grumman Shipbuilding is building the NSCs, while Lockheed Martin is building and integrating the command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities on board the cutters.

Over the four-day trial, the C4ISR systems tested the surface and air tracking radars as well as the communications and navigational systems.

"The C4ISR systems demonstrated multi-mission capabilities simultaneously several times during the trials," said Brian Hillers, Lockheed Martin NSC C4ISR lead system engineer. "All systems performed very well and we look forward to continued success as we approach acceptance trials and delivery."

Among those on board the NSC during builder's trials were 25 members of BERTHOLF's prospective crew. The majority of the crew arrived in the Pascagoula area last month [January] and is completing familiarization training before taking delivery of the ship later this spring.

"I have served over 22 years on Coast Guard ships and this is the most pleasant, easy ride, technically advanced, and modern ship I have ever been on," said BMCS Bob Montague, BERTHOLF command senior chief. "I can't wait to sail her under Coast Guard command." 



Twenty-five members of the prospective Bertholf crew participated in the recent trials.

Coast Guard Takes Delivery of First Two HC-144A Missionized Pallets

Rosslyn, VA (March 17, 2008) – Recently, the Coast Guard formally accepted the first two mission system pallets for their new HC-144A “Ocean Sentry” aircraft. The acceptance follows the successful completion of Developmental Test and Evaluation (DT&E) of the pallet and is a significant addition to the Coast Guard’s aviation fleet.

"We are extremely pleased to have completed this monumental milestone in the introduction of the HC-144A aircraft to the Coast Guard," said CAPT Matthew Sisson, Coast Guard Aviation Acquisition Program Manager. "We appreciate all of the hard work and dedication of those responsible for this achievement. Being the first Deepwater aviation asset to obtain certification of the on board classified network, the HC-144A has paved the way for future Coast Guard assets that pursue similar certifications."

The mission system pallet was built by Lockheed Martin. The roll-on, roll-off suite of electronic equipment enables the aircrew to compile data from the aircraft's multiple integrated sensors and transmit and receive both classified and unclassified information to other assets, including surface vessels, other aircraft, local law enforcement, and shore facilities.

"The delivery is the culmination of a lot of hard work by the entire team," said Mike McGuire, Lockheed Martin HC-144A program manager. "This is an extremely capable package and will make significant addition to the Coast Guard's fleet."

The HC-144A is a multi-role, medium-range transport and surveillance aircraft being acquired through the Deepwater program. The aircraft has the ability to perform multiple missions such as delivering search and rescue equipment far offshore, acting as an on-scene commander, evacuating disaster victims, detecting illegal activity and transporting cargo on quick-loading pallets. 🌐

Mike Fralen, Lockheed Martin aviation program manager, and CAPT Matt Sisson, Coast Guard Deepwater aviation program manager, formally transfer ownership of the first HC-144A mission system pallet.





The two newest Deepwater assets met for the first time during the National Security Cutter's builder's trials in February. USCG photo by PAC Tom Spurduto.



The Long View:

Coast Guard R&D Program Boosts Acquisition of 'Game Changing' Technology

by Hunter C. Keeter, CG-925



WASHINGTON - The Coast Guard's Research & Development (R&D) program, an approximately \$20 million enterprise, is making a real difference behind the scenes providing the service with valuable insight on how state-of-the-market technology can deliver big payoffs in Coast Guard mission capability.

Since spring 2007, the R&D program -- which consists of a headquarters office in Washington and the R&D Center, a research and analysis facility in Groton, Conn - has been consolidated with the Coast Guard's Acquisition Directorate (CG-9). The directorate manages

a \$27 billion investment portfolio of more than 20 major projects, many of which have benefited from R&D prototyping, analysis and engineering support.


Steven Cohen, Deputy Director for Research and Development, said he was confident the R&D program's new connection with Coast Guard Acquisition, coupled with increased investment in R&D, will significantly reduce the service's programmatic risks and improve operational performance.

BIOMETRICS

A good example of the payoff that can be gained from synergy between R&D and acquisition is the use of mobile at-sea biometric technology (digital fingerprinting equipment) to collect data during illegal migrant interdiction operations.

In 2003, Coast Guard District Seven recognized a mission challenge in illegal migrant interdiction. The Coast Guard tasked the R&D program to study the potential of fingerprinting to help stem the flow of illegal migrants through the Mona Pass area from the Dominican Republic and Haiti. The hypothesis was that fingerprinting would speed the identification of repeat offenders and others with criminal backgrounds, helping cutter crews identify subjects for arrest and prosecution by federal authorities.

"Before District Seven had identified its need, and before the Coast Guard had set up a proof of concept project, the R&D program had done more than a year and a half of market and requirements surveys into biometrics technology," said Donald Cundy, Executive Director of the R&D Center. "Because of that pre-



The U.S. Coast Guard's Research and Development Center's future home. After 37 years at the University of Connecticut's Avery Campus, the Coast Guard's R&D Center is moving to a renovated former U.S. Navy facility at Fort Trumbull, New London, Conn. The R&D Center provides scientific analysis and technology prototyping in support of Coast Guard missions and acquisition programs. (USCG file photo)

positioning we were able to go from a no-need-at-all posture to an articulated need and a workable system product in three months. Not only was the technology successful, it essentially completely changed the migrant flow ... It became a 'game changer' and that is what you are looking for when you make investments up front in technology."

During the proof-of-concept phase of the project, which began in November 2006, portable fingerprinting enabled 22 arrests of criminal aliens within 90 days. During the preceding seven years the Coast Guard made virtually no arrests of illegal migrants for repeat offenses or other criminal activity.ⁱⁱ



Photo courtesy of USCG R&D Center.

Between fiscal years 2000-08, the Coast Guard interdicted 31,192 Haitian and Dominican migrants in the Mona Pass area. The total includes more than 8,400 illegal migrants interdicted since 2006 (the first year of mobile at-sea biometric deployment). In fiscal year 2007 alone, biometric technology helped reduce successful illegal migrant landings from 5,552 in 2006 to 5,046 (a better than 9 percent reduction), and helped detain more than 72 individuals for prosecution.ⁱⁱⁱ

As of Feb. 22, 2008, the U.S. Attorney's office in San Juan, Puerto Rico has begun 112 prosecutions for violations of U.S. immigration laws and related offenses based in part on data obtained by the biometrics program.

DEPTH OF EXPERIENCE

Broadly, the R&D program's role in support of the acquisition community is to help program managers mitigate risk. This can range from assessing emerging technolo-

gies to adapting commercially available technologies, or technologies developed by other services, to meet the Coast Guard's unique requirements.

"The R&D program is uniquely qualified for this role," said Cohen. "Our personnel at the Center have impressive depth of experience. They know the Coast Guard, the mission and they have the knowledge -- the average tenure at the Center is 20 years. Also, we can be relied upon to represent the best interest of the Coast Guard; an honest broker for acquisition managers, support managers and, of course, the sponsors and operators."

The service has a limited Acquisition, Construction and Improvement (AC&I) budget-which funds all modernization and recapitalization efforts. So project managers must take low-risk approaches to buying the aircraft, ships, weapons and electronic systems that they deliver to the operating force.

The R&D program supports low risk acquisition strategies by helping project managers choose the best solutions for their products, based on proven technology and by leveraging existing programs, from the DHS Directorate for Science and Technology (CS&T) and from the other military and naval services.

Cundy noted that the Coast Guard leverages other military capabilities by working closely with organizations such as the Office of Naval Research, and the Naval Sea Systems Command Warfare Centers -- the Navy's prototyping facilities for surface and undersea warfare technologies.

Another source of cooperation among S&T projects is through the Technical Support Working Group (TSWG), an inter-agency organization studying technologies potentially applicable to the Coast Guard's missions. For example, the TSWG is working on three-dimensional underwater imaging technology that could provide clearer pictures of murky port environments -- potentially useful technology for defense, security and environmental protection applications.

Partnerships in the government and industry S&T community are important, but the Coast Guard has its own valuable resource in the R&D Center, where a team of scientists and engineers helps the service with crucial pre-acquisition planning, such as supporting the sponsor in requirements generation -- an increasingly important role for the R&D program, Cohen noted.

"Once the requirements are articulated and funding has been identified, we can spring into action in providing acquisition project managers the analysis and prototyping

and support they need," Cundy said. "We provide for the Coast Guard a similar function that the 'military industrial complex' provides the Department of Defense. For the Coast Guard's unique mission set, there really is no 'military industrial complex' to support search & rescue, spill response and other core competencies. The R&D Center has experience in those areas that cannot easily be replicated in the commercial marketplace."

INVESTMENT APPROACH

The R&D program's investment approach has paid dividends in new technologies that enable Coast Guard men and women to do their jobs more safely, effectively and efficiently.

For example, the program created a differential Global Positioning System (GPS) that allows Coast Guard buoy tenders to efficiently service aids-to-navigation without

Identification System (NAIS). Building on a R&D program prototype developed in the 1990s, NAIS allows the Coast Guard to collect safety and security data from AIS-equipped vessels in United States territorial waters and adjacent seas out to approximately 2,000 nautical miles, and to share that data among Coast Guard units and with partner agencies.

In fiscal year 2008-09 the R&D program is continuing its analysis and evaluation of Unmanned Aerial Systems (UAS) for the Acquisition Directorate. This R&D project helps acquisition program managers determine the best capability to fill the surveillance gap of Coast Guard major cutters.

The service has been studying a number of UAS designs -- including the Navy's Fire Scout -- to determine if these have the payload capacity to carry an integrated multi-mode radar and electro-optical/infrared sensor package. R&D's role is to study the risks and costs of various UAS designs and payload configurations, and provide technical support once the Coast Guard has decided on a product for its UAS acquisition project.

Other plans include supporting the Heartland Waterway Vessel project, looking at 'green' propulsion technologies and vessel designs to support future inland-river and Great Lakes cutters.

The R&D program is investigating technologies and procedures associated with Coast Guard operations in the Arctic and Antarctic. The results of this analysis could inform acquisition decisions that address the opening of the Northwest Passage and other environmental changes.

Finally, R&D is developing a set of modeling and simulation tools that support acquisition decisions by reducing the cost of design, development, testing and evaluation of new aircraft, cutters and mission systems.


Meanwhile, the R&D Center is planning a move in spring 2009, to a renovated facility in New London, Conn. The facility is a former U.S. Navy research building, constructed in the 1990s, and will include two other offices, International Ice Patrol and the Marine Safety Laboratory. R&D will lease two floors of the building for project and office space. 



Photo courtesy of USCG R&D Center.

needing to use a horizontal sextant, and the difficulty of sighting on known reference points and performing triangulation underway.

Another project that has benefited from the R&D Program's support is the Nationwide Automatic

ⁱ Approximate average investment of appropriations (enacted, projected and requested), fiscal years 2007-2009

ⁱⁱ "Status and Way Ahead: Biometrics Proof of Concept," USCG memorandum, March 19, 2007

ⁱⁱⁱ USCG Posture Statement, 2008

ANTHONY BOWEN SCHOOL

Books for Anthony Bowen; Elementary School That Is



Washington, DC, January 22, 2008 - The U.S. Coast Guard is known for its service to the Nation through search and rescue, law enforcement, drug interdiction, and many other missions; however, little may be known of its members' activities in local communities. In Washington, DC, many Coast Guard Headquarters members volunteer in the "Everybody Wins When Adults Read with Children Program" at local elementary schools.

One school is the Anthony Bowen Elementary School in Southwest DC, just down the street from CG Headquarters. Members of the Office of Aeronautical Engineering (CG-41), volunteer in the school's reading program.

During the recent Aeronautical Engineering Officers Conference '07', a record setting donation of \$2,258 was collected from the aeronautical engineering community. The money is raised to support a charitable organization in the local community. This year, they decided to purchase and donate books to the Anthony Bowen Elementary School.

On Tuesday morning, 22 January 2008, the Office of Aeronautical Engineering delivered 411 books and two book carts to the school. During a brief presentation, CAPT Joseph Baker, Chief, Aeronautical Engineering, presented the books and carts to Mrs. Almeta Hawkins, Principal; and Ms. Aprille Frett, Everybody Wins coordinator; on behalf of the Coast Guard Aeronautical Engineering community.

Overcome by emotion and finding it difficult to speak, Ms. Frett thanked everyone for their kind and generous gift. As the group departed, two of the children awaiting the arrival of their tutors, couldn't wait to get their hands on the newly donated material. All, in all, what seemed like a small gesture for the school turned into a heartwarming day for everyone involved. 🌐



Members of CG-41 prepare book carts for presentation and donation to the Anthony Bowen School.



CAPT Joseph Baker (right) presents the books and carts to Mrs. Almeta Hawkins (left) and Ms. Aprille Frett (center) as a gift during a brief hand over ceremony.

An Anthony Bowen student eager to get her hands on the newly donated books.



Is Prior Marine Safety Experience Critical to Compete for MSSE?

by Larry P. Steinmetz, MSSE4
CG-48, MSS/PSS Specialty Force Manager



NO!

I could end this article with that one word but that would be an unsatisfactory answer to a very critical question many Coast Guard members are asking. I hope to shed some light on my beliefs as the MSS Specialty Force Manager and why I so emphatically say no to this question. First though, I would like to bring everyone up to speed as to where we are currently at.

As many have seen by email, message board or in the media, the Marine Safety inspections and investigations program is currently suffering from a historic lack of experience, training and customer relations with our industry partners. There are many well-documented reasons for this decline; a decline from days past when we were clearly recognized as the world's leader in marine safety. The Commandant has made it a high priority to right our marine safety ship and a massive effort is currently underway to tackle ALL of the many challenges we face to regain this respect; a respect that can only be earned by, first, recognizing what the true challenges are and, second, meeting these challenges head on. One important challenge that has already been successfully met is the recent realignment of the Marine Safety Specialist (MSS) into separate specialties: Marine Safety Specialist Deck (MSSD) and Marine Safety Specialist Engineering (MSSE).

The very day I reported in to my job, July 1, 2005, as the first MSS Specialty Force Manager, the message was released to the field with the results of the CWO appointment board that had been held in April 2005. This was the first board where enlisted members specifically had to compete for a marine safety specialty, MSS, instead of their legacy specialties (BOSN, ENG, MAT and WEPS) if they wanted to be in marine safety.

With the establishment of the MSS specialty in 2005, the process of how we selected marine safety Warrant Officers dramatically changed. Prior to June 1, 2005, the enlisted ratings competed for selection to their respective CWO specialties (BOSN, ENG, MAT, WEPS). Upon successful selection for CWO some were given the choice of staying in their legacy program or taking an assignment in Marine Safety. This assignment process and the numbers of people newly assigned each year to Marine Safety were determined by the Marine Safety warrant Assignment Officer (AO). The AO based this decision each year on the approved retirement letters on file, vacancies created by CWOs selected for Lieutenant, CWOs going to OCS, etc. This process closely matched the Marine Safety need by supplying the program with the necessary legacy enlisted experience to replace that that was leaving.

Beginning with selection year 2005 (appointments beginning 1 June 2006) all of the enlisted feeder ratings competed directly on the newly created MSS CWO eligibility list for Marine Safety vacancies. During the 2005 and 2006 appointment boards, the process of having seven enlisted ratings compete for promotion to one CWO specialty failed to provide the rating diversity necessary to maintain the requisite blend of engineering and deck expertise. In short, engineers were not being selected in adequate numbers to replace those lost through retirement and/or CWO to LT causing a projected, complete inversion of deck and engineering experience of the specialty by 2009. The pre-MSS ratio was 65% engineering and 35% deck.

Long story, short, I convinced many within our program that the way the MSS specialty was designed would have long term disastrous effects in our ability to carry out our marine safety inspections and investigations mission. I routed a decision memo that eventually landed on the Commandant's desk. I briefed him on my five-step proposal and he approved all aspects of the memo. The most important proposal was to separate the MSS specialty into two different specialties: MSSD and MSSE.

Okay, I think we are all caught up now so back to the question... "Is Prior Marine Safety Experience Critical to Compete for MSSE"? As I have already answered; no it is not! In fact, the definition found in the Personnel Manual, Article 1.D.13.I, for a MSSE includes the following excerpt, "Prior enlisted experience in the marine safety program is not a prerequisite for selection to MSSE." As the Force Manager for the MSS specialty, I would rather have an engineer that had multiple tours underway on Coast Guard cutters mixed in with shore duty assignments at units such as a small boat station. This type of assignment history lays a very solid foundation for gaining technical engineering expertise as well as the interface with industry one finds while stationed at a small boat unit. Experience and customer relations, two of our problem areas right now, are gained with this assignment history; NOT being assigned to a marine safety billet.

Oh, but "what about the marine safety 'experience' being gained by an engineer assigned to a marine safety unit" and how could that "not be anything but an asset when making MSSE"? Short answer ... enlisted engineers in marine safety billets, especially E-6 and below, are learning to be Marine Science Technicians (MSTs); not engineers. They are not honing their technical expertise in machinery plants (diesel, gas, steam, etc.) or in hull repairs (welding, NDT, fiberglass, wood, etc.). They are not learning the challenges of keeping a plant running to meet a critical mission; how to manage underway watches and routines when short-handed; the technical aspects of machinery, electricity, hydraulics, good engineering practices, etc. Finally, an engineer straight out of A school brings very little to our program but a brief brush with what being an engineer means only to be followed for the next four years with what it REALLY means to be an MST.

As a natural growth of being an MST, they gain a great understanding of the marine safety program, how to interpret and enforce the legal instruments governing marine safety, and are in fact, THE marine safety enlisted rating. They leverage this knowledge of the program further when they make MSSD. On the other hand, MSSEs are expected to bring the technical engineering expertise to the table; marine safety knowledge will follow in due time.

Our program needs MSSEs that have a very solid engineering background. Learning how to apply these skills


to the marine safety program once becoming an MSSE is no doubt challenging. However, the far greater challenge than learning how to apply laws, regulations and international agreements to the job is to truly be an engineering expert the day you put the boards on. The Marine Safety program can teach you to be a Machinery Inspector (MI) but, without the deck plate experience gained only from sea duty and work in the small boat communities, it



MSSE2 Harley Bates inspecting the boiler mud drum on board the Paddle Wheeler American Queen in New Orleans, LA. (Photo provided by MSSE2 Harley Bates)

defies the odds that we can teach you to be an expert. Our subject matter experts (SMI) are not people who merely earn a qual at the entry level; they are people who bring their life experiences and Coast Guard technical training and expertise to the table. When they have coupled this expertise with marine safety experience; they truly become a much needed asset to marine safety and the Coast Guard. This is what industry and Congress have noted as lacking from our current program and what Admiral Allen and many others are dedicated to changing. As long as I am the MSS Specialty Force Manager, I will fight to ensure that we step up to the challenge, not meet lower expectations. 🇺🇸





Aligning DHS and Component Headquarters Facilities to Enhance Mission Performance

1 Community...Supporting 1 Mission...Fulfilling 1 Vision...1 DHS

by Captain Chris Mills, P. E.
Program Manager
Consolidated DHS Headquarters at St. Elizabeths West Campus
Department of Homeland Security

The ongoing planning for construction of a new Coast Guard Headquarters at the St. Elizabeths West Campus, in Southeast DC is a source of great interest for many of our shipmates in the National Capital Region (NCR). While it is natural to consider this move from a Coast Guard centric lens, a broader view reveals that our new headquarters is an integral part of a strategic realignment of the Department of Homeland Security's (DHS) real estate portfolio to enhance overall mission performance. This article provides an overview of the consolidation initiative and the planning for the St. Elizabeths development.

The Need for Consolidation

The DHS mission is to lead a unified national effort to secure America. This effort demands an integrated approach, yet the Department's legacy facilities are dispersed in about forty locations and seventy buildings throughout the NCR. Realigning our facilities to support mission performance is vital to the long-term success of the Department. Secretary Chertoff noted the importance of this effort in his message accompanying the submission of the DHS NCR Housing Master Plan to the Congress in October 2006:

"...Today, over 60 buildings housing DHS employees are scattered widely throughout the capital region. This extreme dispersion imposes significant inefficiencies in daily operations, problems that are magnified considerably at the most important moments -- when the Department must act as a nimble and integrated team responding to significant natural disasters or terrorist threats. When DHS was created, it was appropriately built with dispatch. Now is the time to make a commitment to the Department's future by creating the consolidated campus needed to support DHS operations and integration..."

Defining the Requirements

In the fall of 2005 working with the General Services Administration (GSA), the department began development of a Program of Requirements (POR) to determine the current and future Headquarters real property needs in the Washington metro area. Today, the department and component headquarters require over 7 million gross square feet (GSF) of office space plus parking needs (dependent on location) in the NCR. This figure is estimated to grow to approximately 8.5 million GSF in the next several years with maturing departmental organizations and new program

needs. In addition, the department has already undergone two reorganizations in the first five years of operation with the Second Stage Review and the Post Katrina Emergency Management Reform Act. Both of these changes have had a significant impact on the real property portfolio within the NCR. Figure 1 is the current DHS Organization Chart.

To effectively meet the challenges of constantly changing threats against the homeland, there is a strategic imperative to unify the Department operationally, administratively, and culturally. Both our organizational structure and our real estate portfolio must be adaptable and remove physical barriers that impact our mission performance, promoting unity of purpose and effort.

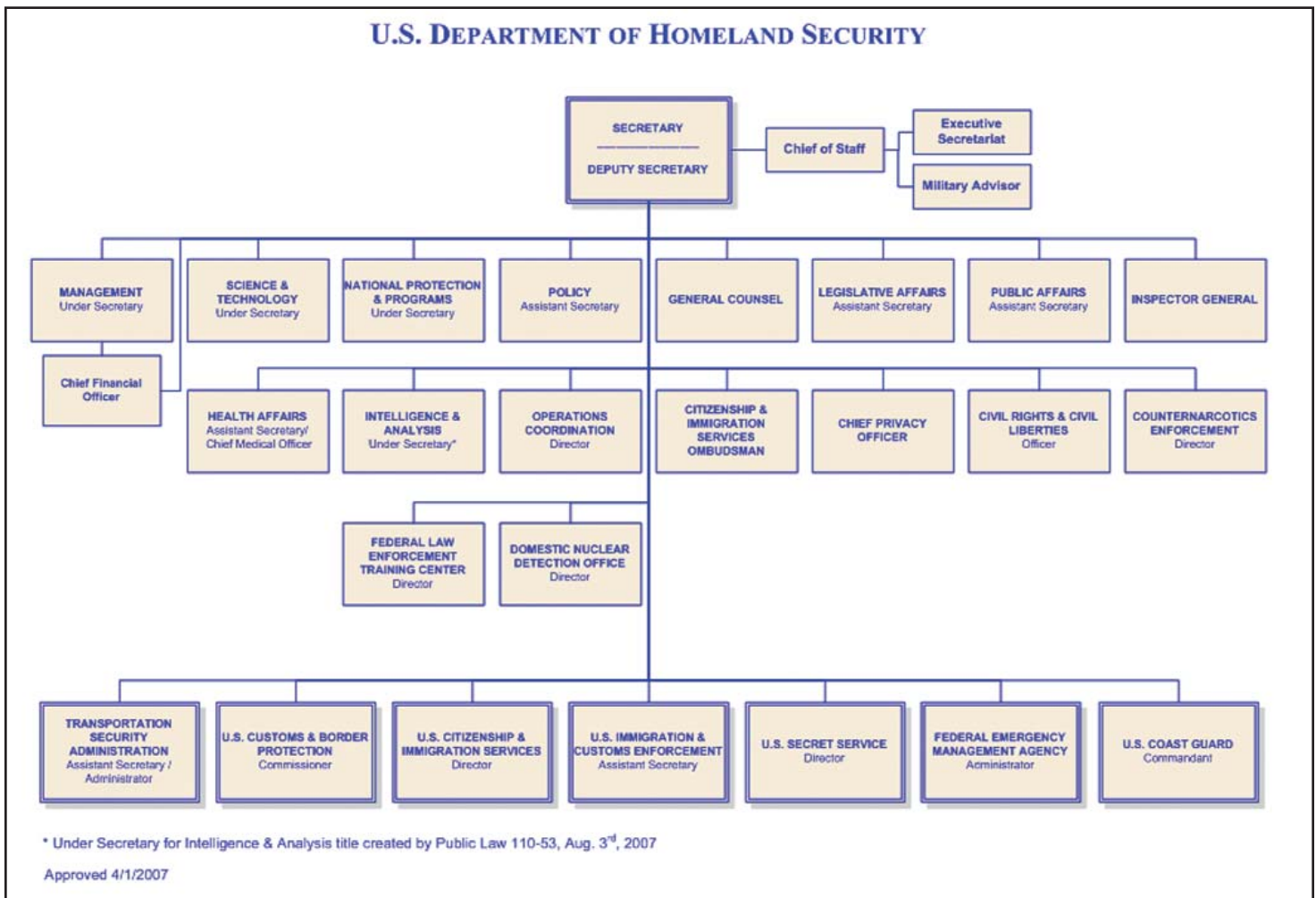


Figure 1. Department of Homeland Security Organization Chart.

Given the magnitude of the portfolio and the lack of a site within the NCR capable of housing the entire DHS need, a careful analysis of the critical core mission execution functions determined that a minimum critical mass of 4.5 million GSF of office space plus parking must be collocated on a secure campus. The housing plan for the Consolidated DHS Headquarters at St. Elizabeths is based on the guiding principle that the secure campus must serve as the center of gravity for leadership, operations coordination, policy, and program management in support of the department's strategic goals. The campus focus is on those critical mission execution functions that

facilitate integrated decision making, communications, synergy among components and effective operations coordination.

Mission support activities that cannot be accommodated at St. Elizabeths are planned to be consolidated down to six to seven locations (plus St. Elizabeths), yielding a more efficient and effective portfolio that supports functional integration. The Nebraska Avenue Complex, while not suitable for the permanent Headquarters, will be retained in the portfolio for certain mission support functions. Anticipated growth will be managed through the

off-campus housing while maintaining a stable 4.5 million GSF occupancy for the critical core functions at the consolidated HQ campus.

Why St. Elizabeths?

DHS provided the minimum requirements including size, timing and security needs for a consolidated headquarters campus to GSA in the fall of 2005. As the federal government's real estate developer, GSA analyzed available federal properties within the NCR, which included thirteen alternative locations. GSA concluded that St. Elizabeths was the only site under the federal government's control that has the location and capacity for high security features to meet DHS's needs on a realistic timetable. The 176 acre campus terrain provides sufficient setbacks and natural buffer zones to meet the Interagency Security Committee (ISC) requirements without costly hardening of buildings that would be necessary in downtown locations. As one of the few remaining large tracts of land within the District, St. Elizabeths is a prime location, within 2.5 miles of the U.S. Capitol and 3 miles from downtown/Federal Triangle.

GSA was already in the early stages of preparing a Master Plan and Environmental Impact Statement (EIS) for the redevelopment of the St. Elizabeths West Campus and incorporated the DHS requirements into the alternatives

under consideration. Although the President's Budget for FY (Fiscal Year) 2006 had previously announced the relocation of CG Headquarters to St. Elizabeths, the DHS decision to strategically realign the entire NCR headquarters portfolio has positioned the Coast Guard to serve in the "lead ship" capacity to establish the campus Initial Operating Capability (IOC) in the first phase of development. DHS Headquarters, the National Operations Center (NOC) and FEMA will follow in phase 2, and the remaining components in Phase 3.

St. Elizabeths West Campus Master Plan and Environmental Impact Statement

The most challenging aspect of this development is the designation of St. Elizabeths Hospital (both the East and West Campus) as a National Historic Landmark (NHL). The West Campus is a 176 acre federally owned parcel, currently vacant and in the custody and control of GSA. The buildings and the infrastructure on the campus are in a severely deteriorated condition. However, GSA has made significant progress in stabilizing the site since acquisition in December 2004. The East Campus is owned by the District of Columbia (DC) Department of Mental Health, which still operates a mental health services hospital with a population of 300-400 patients. The two campuses are divided by Martin Luther King Jr. Avenue. Figure 2 below provides an aerial view of the region.

Figure 2. Aerial View of St. Elizabeths West Campus Looking South.



The NHL designation is a reflection of the historic significance of the hospital. St. Elizabeths was founded in 1852 as the first federal mental institution and admitted its first patients in 1855. It was established for the moral treatment of members of the Army, Navy and citizens of District of Columbia. St. Elizabeths was at the forefront of mental health treatment at the time, as the hospital incorporated site selection, planning, building layout, circulation and the cultural landscape into the curative treatment process for mental illness.

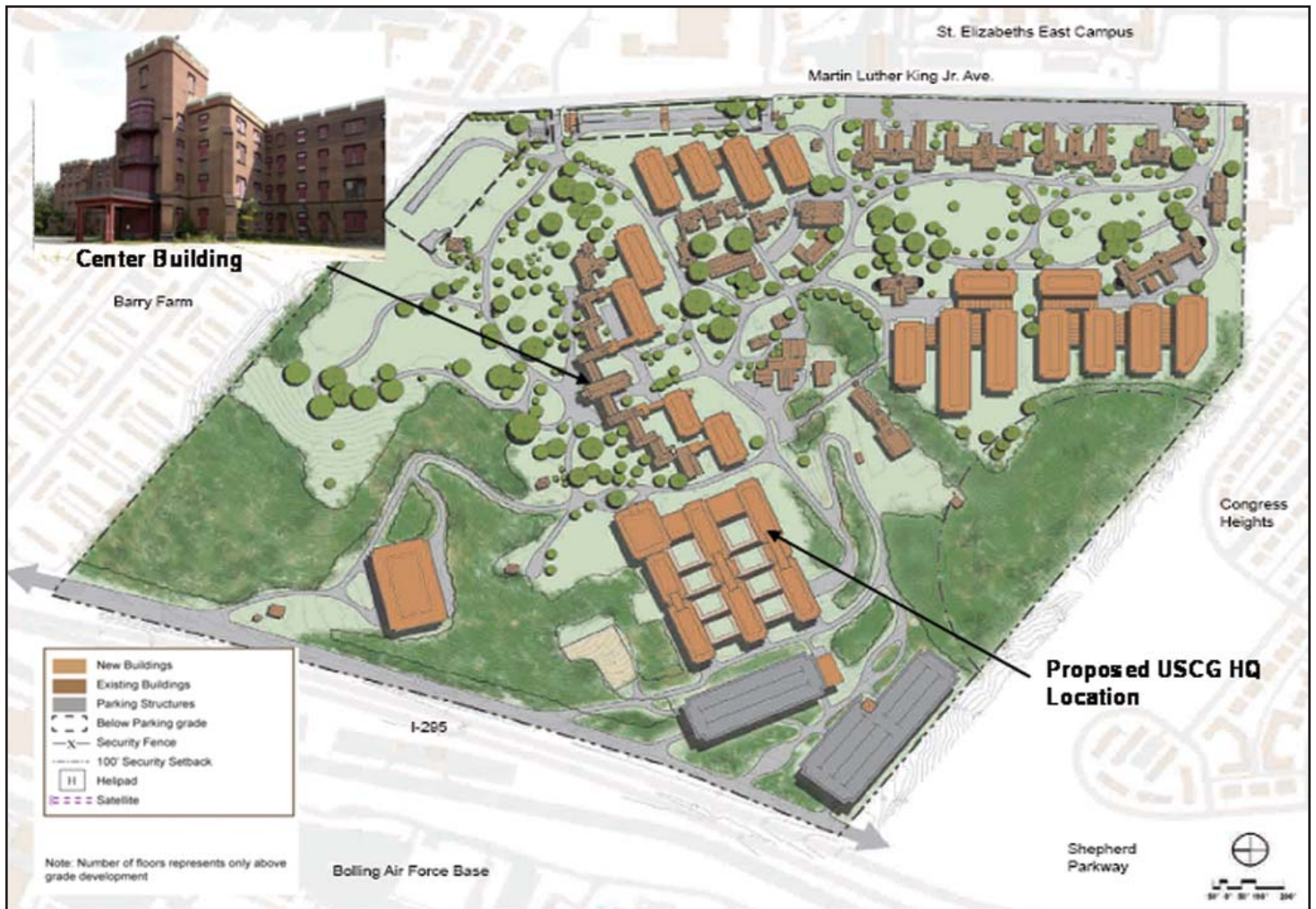
The NHL status conveys additional requirements for the redevelopment of the site under Section 110 of the National Historic Preservation Act (NHPA). Most of the buildings and the cultural landscapes, including the vegetation, circulations, spatial relationships, view sheds (views into, out of and within the campus) are contributing resources to the landmark designation. GSA is required to in part "...take all planning and actions that may be necessary to minimize harm to the maximum extent possible...." In carrying out this responsibility, GSA has engaged in an extensive public outreach and

consultative process with stakeholders and interested parties throughout the community.

GSA's Draft Master Plan reflects careful consideration of the NHL status and integrates new development with the remaining contributing resources in such a way that it meets DHS program requirements while preserving and protecting many of the tangible and intangible characteristics of the NHL. GSA identified two preferred alternatives as shown in Figures 3 and 4. These diagrams represent massing only and do not reflect actual design. Both of the preferred alternatives would:

- ❑ Provide adaptive reuse of between 82-89% of contributing historic square footage to the NHL, including the Center Building, which is considered the most historic and important building on the site.
- ❑ Concentrate new development around the outer edge of the campus (including parking), thus retaining the therapeutic walking nature of the campus. All new development on the plateau would be limited in height to retain the prominence of the Center Building.

Figure 3. Master Plan Preferred Alternative 3.



- ❑ Preserve the NHL identified historic view sheds into, out of and within the campus.
- ❑ Restore the historical prominence of the Center Building in the campus layout as it would serve as the Secretary's Headquarters Office.
- ❑ Provide a zone where activity is excluded to avoid disturbing a protected species located just off the St. Elizabeths property.
- ❑ Include remediation of contamination, as required, from over 150 years of occupancy of the campus.
- ❑ Limit transportation impacts on Martin Luther King Jr. Avenue and the surrounding residential communities through the construction of a new campus access road along the western boundary to provide easy access to Route 295, Suitland Parkway and South Capital Street.
- ❑ Coordinate occupancy phasing with regional transportation improvements already being planned and implemented by the District Department of Transportation and the Federal Highways Administration.

- ❑ Support economic growth and redevelopment within Ward 8 from 14,000 DHS employees and increased demand for retail and commercial office space.
- ❑ Recognize the historic tradition of St. Elizabeths as a secure campus for patient privacy/protection and incorporate physical security requirements with great sensitivity toward the visual impacts of security.
- ❑ Provide limited public access to portions of the facility consistent with mission requirements and threat conditions.
- ❑ Provide a functional and effective campus for DHS operations and integration.

The primary difference between the two preferred alternatives is the treatment of the area behind the Center Building. Alternative 3 is a more efficient layout from an operational perspective as it provides for office additions to the rear of the Center Building to allow all of the key headquarters functions to be located directly with the Secretary's office. Alternative 4 is an attempt to preserve the campus core to a greater extent by limiting the devel-

Figure 4. Master Plan Preferred Alternative 4.



opment behind the Center Building to necessary circulation additions only (no office space). The Center Building is an extremely long and narrow building. As constructed there is insufficient width to simultaneously provide private office space, open office space and public circulation space. The office space lost in alternative 4 is relocated to the lawn area to the northeast of the Center Building.

Transportation is a critical aspect of the master planning effort and all alternatives propose the development of a new access road along the western edge of the property connecting from Firth Sterling Avenue to Malcolm X Avenue and Route 295. This access road would minimize impacts on the surrounding neighborhoods and provide employees with improved connections to commuting arteries.

Both alternatives currently propose the USCG Main Headquarters be located along the western ridge and slope with panoramic views of the city. Shared services such as the cafeteria, child care, etc. would be located in fully renovated and adaptively reused historic structures that are appropriate for the functions be housed. Some of the historic buildings would also be used as administrative office space for various DHS activities. Figure 5 depicts one of the buildings proposed for adaptive reuse.

The Draft Environmental Impact Statement (DEIS) for the project was issued for public comment in September 2007 and GSA conducted a public hearing on the proposed development in October of 2007.

Comments received on the DEIS and consultations with the planning agencies and various stakeholders

raised concerns regarding the impact of the proposed development (4.5 million GSF of new and adaptive reused space plus 1.8 million GSF of parking) on the NHL status. There is also specific concern over the amount of mass at the proposed location for the USCG

Headquarters. GSA is currently analyzing all of the responses and will address them in the Final Master Plan and Final EIS Record of Decision to be issued later this year.

One of the recommendations made by the Consulting Parties is to relocate some of the DHS program requirements to the St. Elizabeths East Campus. DHS and GSA are working with the DC Office of Planning to examine the feasibility of expanding into a portion of the East Campus and still meet our program and time requirements.

Given the sensitivity of the campus, we recommended that GSA use 3-dimensional (3-D) building information models (BIM) as a tool to provide a more accurate and realistic depiction of the impacts of new construction on existing historic resources. Within the Coast Guard Civil Engineering Program, we have the ability to utilize BIM technology in the development of regional strategic plans, sector command centers and building renovation designs. Many industry leaders are now integrating 3-D modeling, financial databases, and scheduling technologies into a 5-D (3-D plus time and financials) integrated decision making tool to identify errors, omissions, and building system conflict detection before they are experienced during construction. Even more important for a



Figure 5. M Building -- Potential uses include: Administrative office, GSA Facilities Management; Barber Shop, Credit Union.

site like St. Elizabeths, 5-D modeling and simulation can identify the most effective layout for site logistics and construction phasing to minimize the impacts on historic resources and optimize construction efficiency, all before the first spade is turned on the site.

GSA embraced this recommendation and BIM technology has become a critical tool to foster fact based dialogue among all the stakeholders to gain an understanding of the site and the impacts of development on landscapes, view sheds and spatial relationships. Figures 6 - 8 show as an example the use of this technology with one of the concepts under consideration for the new

USCG Headquarters. The models allow you to virtually walk or fly through the campus to experience how the buildings work from all angles on or off the campus. No final decision has been made on the location or design of the USCG HQ within the campus. The concept below is just one example of how the mass might be represented.



Figure 6. USCG HQ Concept Sketch demonstrating mass and scale compatibility on the plateau level with the Center Building to the left.



Figure 7. USCG HQ Concept Sketch demonstrating how the building works within the landscape down the western slope to provide necessary mass without impacting scale on plateau or impacting views to the campus.



Figure 8. USCG HQ Concept Sketch demonstrating that a large mass can appear in scale on the plateau and is disguised on the slope by working within the landscape and adding a green roof. No architecture has been added to the exterior of the concept at this stage.

Next Steps

GSA will be working throughout the remainder of the fiscal year (2008) to complete the Final Master Plan, EIS and Record of Decision. To achieve these milestones, GSA must first conclude consultations in accordance with Sections 106 and 110 of the NHPA. Success is defined by the execution of a Programmatic Agreement, outlining the measures to be taken in the construction of new facilities and the renovation of existing historic resources to preserve and protect the National Historic Landmark.

The Congress appropriated funds for the Coast Guard Headquarters design (\$24.9 million) in FY 2006 and provided GSA with funds for infrastructure and stabilization efforts for the St. Elizabeths West Campus. The FY 2008 Consolidated Appropriations Act did not provide funding for either GSA or DHS to begin construction of Phase 1 of the development. While the lack of FY 2008 funding is disappointing, the delay does provide GSA with additional time to fully analyze the comments and concerns in the DEIS and Draft Master Plan. The President requested funding to begin construction of the Consolidated DHS Headquarters at St. Elizabeths in the FY 2009 Budget submitted to the Congress and Secretary Chertoff reaffirmed the importance of this initiative to the long term success of the Department. Estimated com-

pletion of the new USCG Headquarters is approximately thirty six to forty two months after funds are appropriated for the construction, assuming GSA's successful completion of the Master Plan, Environmental Impact Statement and Programmatic Agreement as outlined above. Mr. Donald Bathurst, Chief Administrative Officer for the Department of Homeland Security summarized the criticality of this effort in testimony before the National Capital Planning Commission on November 1, 2007:

"...It is important to understand that we are not only master planning a site which as we know is a national historic landmark, we are also master planning how the Department of Homeland Security will function to support the national interest. We are not simply placing square footage on a piece of property; we are aligning our facilities to support the federal government's most critical responsibility: the protection of its citizens. That responsibility demands facilities that support close cooperation, coordination communication and integration..."

The DHS Consolidated Headquarters Initiative is a very challenging yet vital effort to align our facilities to support the mission and to a fully integrate the Department operationally, logistically and culturally. 🌐



Homeland Security

St. Elizabeths West Campus



... Supporting

Community

mission

... Fulfilling

vision



DHS

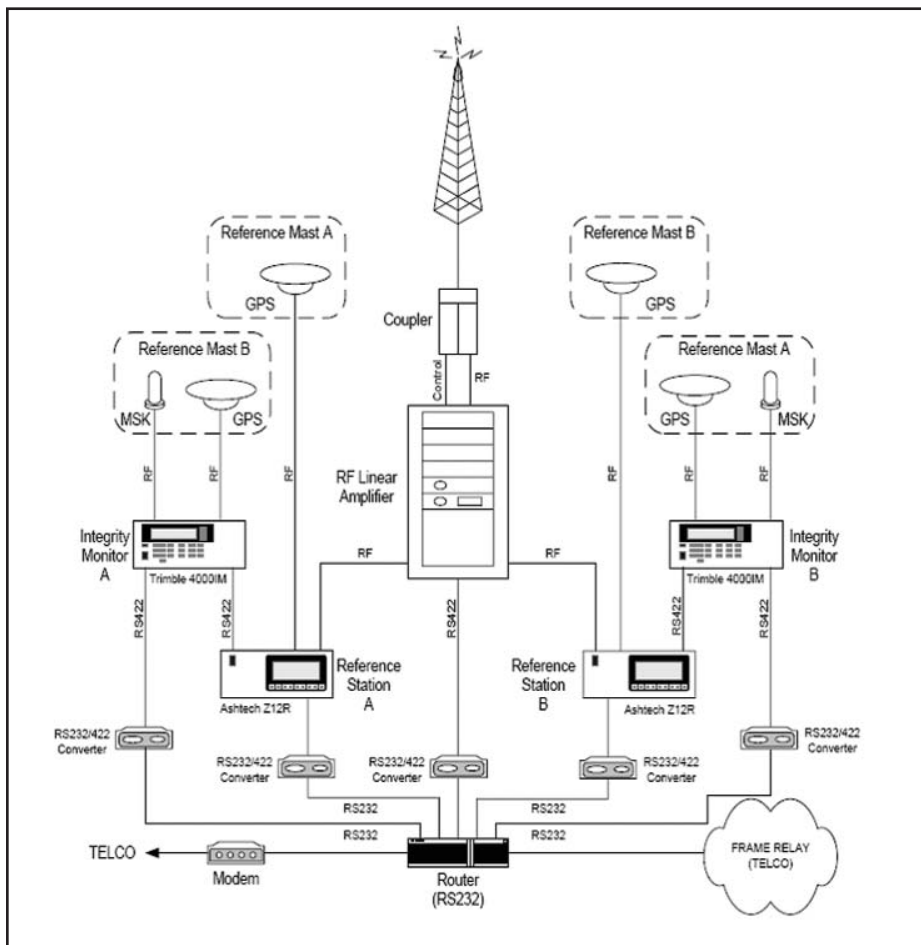
C2CEN Begins Fielding of Next Generation DGPS

In February, 2008, C2CEN began fielding a significant improvement to the Differential Global Positioning System. This will extend the life of the system for many years to come while also providing a substantial increase in performance, flexibility and supportability. The improvements are centered on the major functional components of the system: the Reference Stations -- used to calculate and transmit pseudorange corrections to properly equipped users, and the Integrity Monitors, whose function it is to check the validity of the transmitted corrections, ensuring users can depend on having the correct information. The fielding of this new equipment represents the culmination of nearly 5 years of engineering effort by C2CEN personnel.

Early on, the U.S. Coast Guard partnered with industry to develop a software application that would replace legacy hardware equipment and run in an open system architecture environment. By using high end, rack mount computers and configurable software to perform the functions previously done by the older hardware, C2CEN was able to provide greater flexibility for future



New equipment rack at Driver DGPS Site showing computers, receivers, Ethernet switch.



Legacy System showing serial-based communications and hardware-based reference stations and integrity monitors.

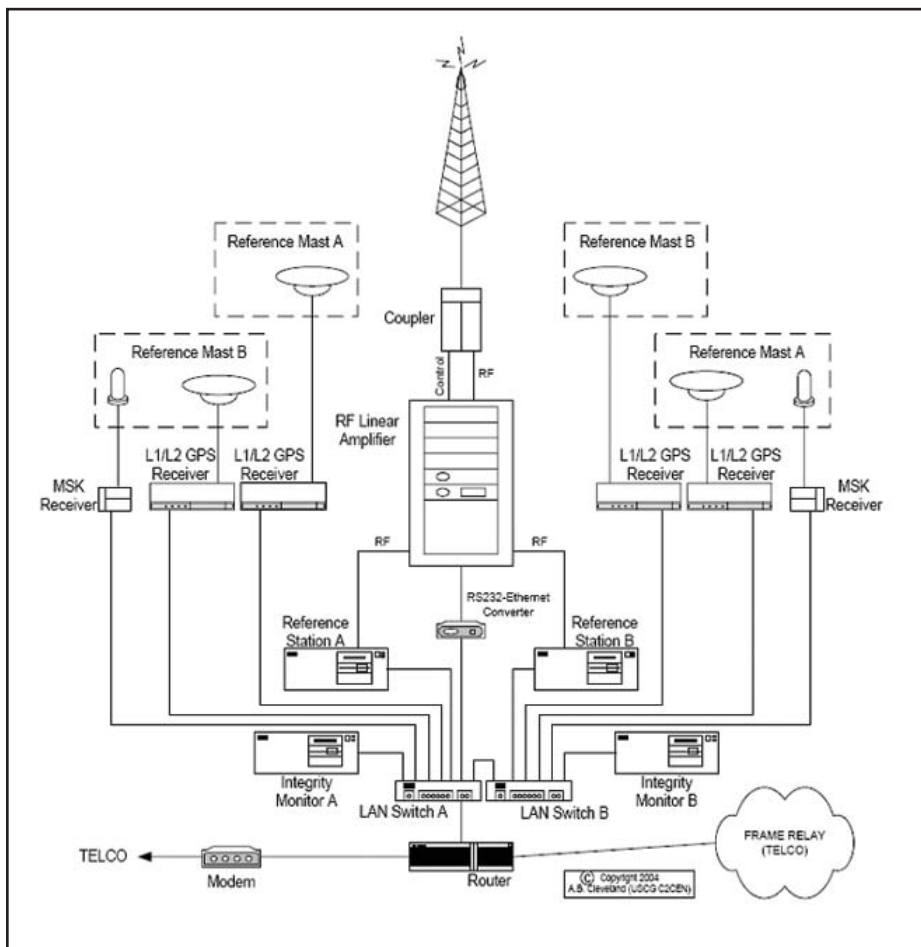
enhancements to the system, more robust support to the fielded system, and because the software is the latest industry has to offer, the best performance to date for DGPS.

Another major change during the recapitalization effort was a move to an Ethernet-based architecture. This replaced the serial communications used before and provides communications directly to each piece of equipment at the Broadcast Sites, directly impacting system availability. Another benefit of the Ethernet-based architecture is upgradeability. In the future, as new Satellite Navigation Systems come on line, such as Galileo and other new GPS signals, the USCG will be poised for "plug and play" receivers that manufacturers are working on now, further enhancing the performance of the system.

The new DGPS system architecture allows the USCG to continue to deliver and improve navigation and positioning services to users in the United States and its territories.

POC: Brent Carroll, steven.b.carroll@uscg.mil, 757-295-2245, <http://www.uscg.mil/hq/c2cen/DGPS.html>

System improvement and support information can be found in Engineering Change 04 and Field Change 19 to DGPS. 🌐



New System. The reference stations and integrity monitor computers are all the same type, as well as the receivers.

Remote Radio Activated Sound Signal (RRASS)

by Alan Davis and Dave Tanner, C2CEN

The 1SG38-RRASS Remote Radio Activated Sound Signal Unit, hereafter referred to as the RRASS, was designed to replace the First District INTRAC boxes that were placed into service by the Aids to Navigation Teams in that district. The INTRAC was a nonstandard installation used to remotely turn on/off fog horns. In 2004, Electronics Support Unit (ESU) Boston requested a replacement for the INTRAC that would be standardized and supported by the Coast Guard.

Requirements were defined; an Engineer Change Request (ECR) placed on file; followed by the unit design and then coding of the software for the Signal Board Computer (SBC). Two prototype sites were chosen to test the design as first conceived. They were Brant Pt. Light to Nantucket Jetty Light 3 in November 2005 and Owls Head Light to Rockland Jetty Light in April 2006. Tests were run for about eight months. Several design enhancements were made. In August of 2006, a priority request came from the Eleventh District to have a RRASS system installed on Monterey Jetty Light 6 which was added to the prototype list. As word spread, the RRASS, intended for only two Districts, has now spread to over five Districts. The contract to build these boxes was let in December 2007 with delivery beginning in the spring of 2008.

EQUIPMENT DESCRIPTION

The purpose of the RRASS is to control the operation of various Short Range Aids to Navigation (SRAN) navigational devices (e.g., Sound Signals, Rotating Beacons, Lanterns, etc.) that are located in remote or hard to get to locations. The RRASS can be installed in any of the Lighthouse Categories in order to operate the remote devices for that particular configuration. Figure 1 is a block diagram of the RRASS.

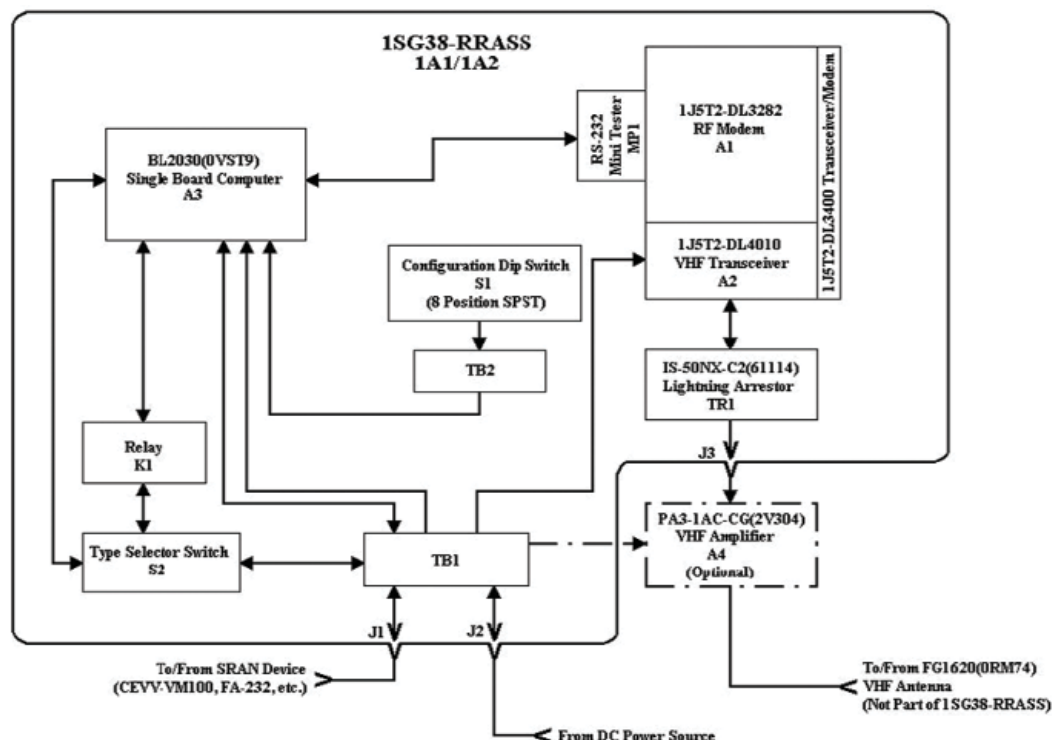
The RRASS unit consists of a Single Board Computer (SBC) housed within a NEMA environ-


RRASS Control Site with VM100 Fog Detector, USCG Station Monterey, CA



mental proof container along with a VHF Transceiver/Modem operating at a frequency of 164.300 or 168.2875 Mhz, an optional amplifier, an eight (8) position configuration dip switch (CDS), a 3-pole double throw type selector switch, a relay and a lightning arrestor. The lightning arrestor is installed to protect the unit from a possible lightning strike to the antenna. The setting of the CDS determines how the RRASS unit is configured. The unit is designed to work with

Figure 1. 1SG38-RRASS Block Diagram.



most SRAN equipment. In SRAN configurations, one RRASS unit is configured as a Control Unit (CU) and is connected to a controlling device such as the VM100 Fog Detector. However, the controlling device may be as simple as a toggle switch. A second unit is then configured as a Receiving Unit (RU) and connected to a remote indicator such as a navigational light or sound signal (ex. FA-232). The SBC within the CU monitors the operation of the controlling device, VM100 Fog Detector, until there is a change in the condition being monitored. The CU will then transmit this change to the RU to either turn on or turn off the remote device. The SBC used in the RRASS is also capable of monitoring other conditions such as a failure timeout, manual test, or board failure and to initiate the required action between the two units. Figure 2 shows the connection of the RRASS unit in a typical SRAN configuration. 



One of the First Prototype RRASS Control/Remote Units.

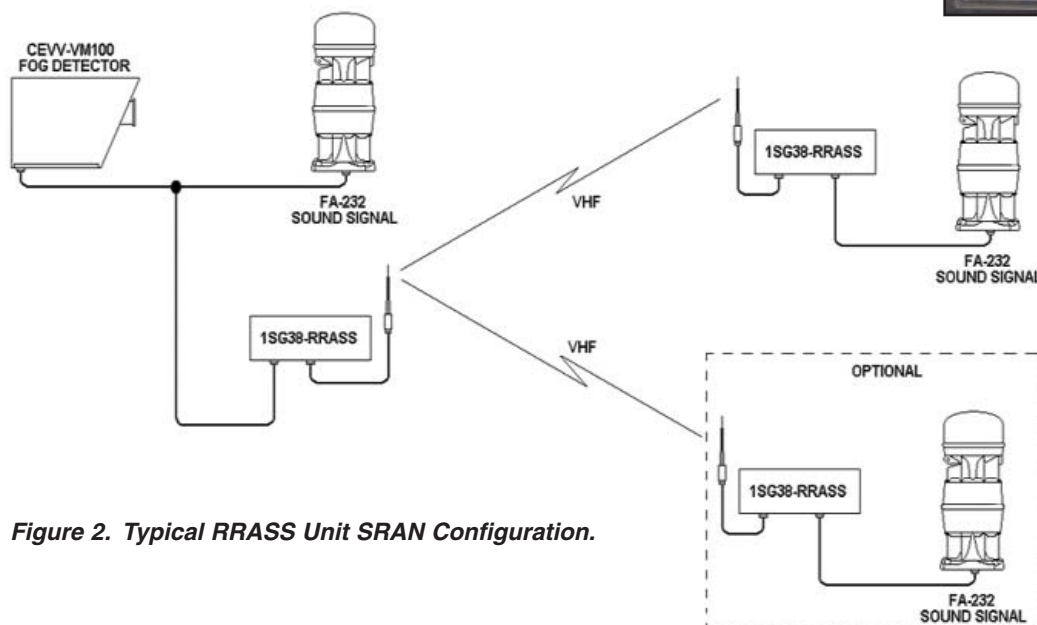


Figure 2. Typical RRASS Unit SRAN Configuration.

Creating an SOA (Service-Oriented Architecture) Environment for COP (Common Operating Picture) with CWSS (Web Services System)

by LT Evangeline Gormley, C2CEN



The Command and Control Engineering Center (C2CEN) engineers are moving forward with the Coast Guard's vision for Service-Oriented Architecture (SOA). By manipulating new software and configuring existing hardware, C2CEN engineers have designed the Common Operating Picture (COP) Web Services System (CWSS) to embrace this vision and to improve resources for COP operators and users. CWSS provides an enterprise solution for tactical data management and data sharing in the unclassified environment. Its equipment suite is a contributing component of the larger CG Sensitive But Unclassified (SBU) COP system as it enhances the capabilities of the CG SBU COP by making it compatible within an SOA environment. The CWSS architecture implements and supports data services, which can be easily customized to meet enterprise SOA and keep pace with continually evolving command and control technologies. This architecture also provides the fundamental building blocks for additional SOA based COP applications and services. Figure 1 is a simplified diagram of the CWSS architecture that is installed at the CG Operations Systems Center (OSC) in Martinsburg, West Virginia. It is supported by contracted personnel at C2CEN as part of the CG SBU COP.

CWSS incorporates web services, Geographic Information Systems (GIS), application servers, and database storage for tactical command and control products. It currently manages tracks from Cellular Blue Force Tracking (CBFT), Customs and Border Patrol (CBP) Air-Marine Operations Center (AMOC), National Oceanic and Atmospheric Administration (NOAA) Vessel Management System (VMS) and the Inland Rivers Vessel Movement Center (IRVMC). The core CWSS system provides a high performance database, web services, and track management with a real time connection to the CG SBU COP. CWSS database services are obtained via Oracle 10g, web services via Microsoft Internet Information Server (IIS) and web application services via Apache Tomcat.

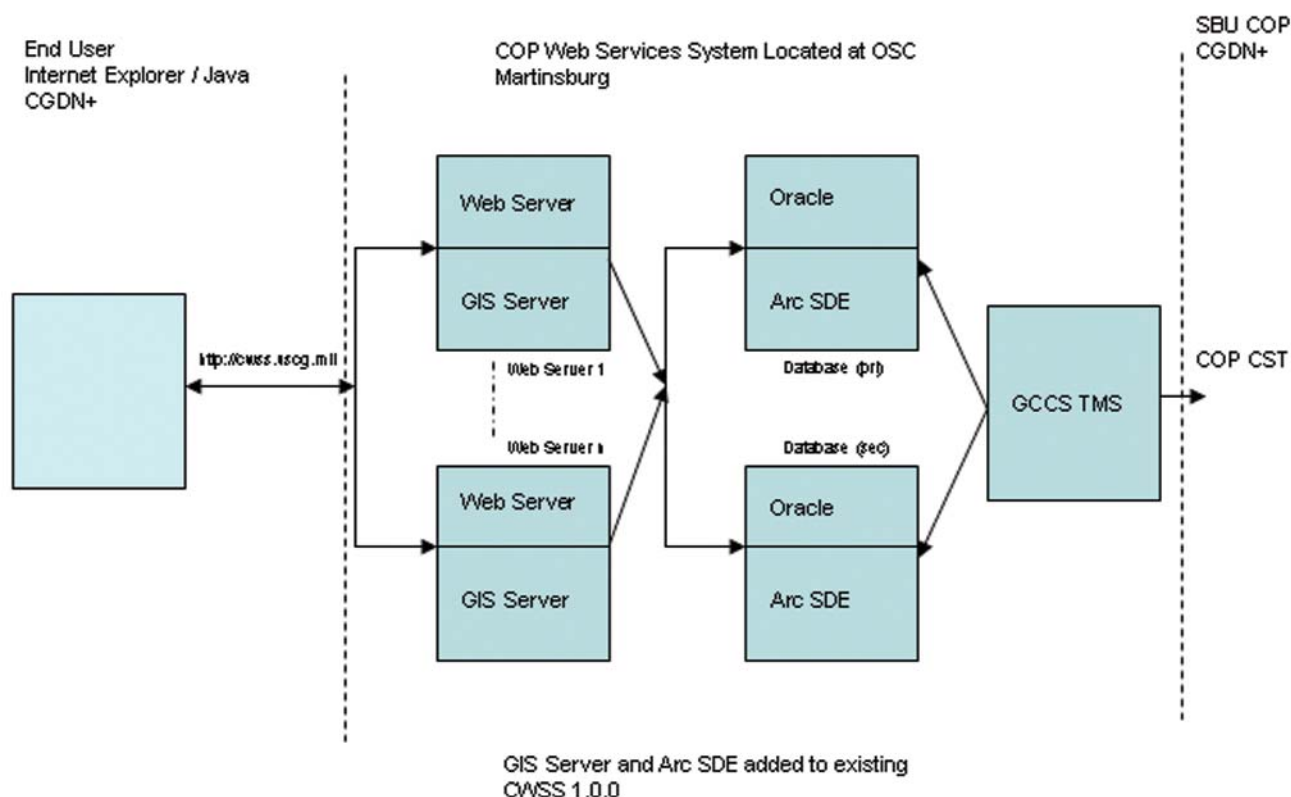


Figure 1. Simplified Drawing of CWSS Architecture.

Cellular Blue Force Tracking (CBFT)

One of the first products deployed on CWSS to provide greater Maritime Domain Awareness (MDA) of Coast Guard Blue Forces was CBFT. With the use of enterprise information services, CBFT augments the CG COP and imparts a uniform data representation for Coast Guard operational commanders and users. Blue Force assets are monitored using a select commercial phone or handset with the installed cellular-based technology. Each cell phone automatically reports and injects track data and positions from the Blue Force asset into the CG SBU COP. Operational commanders can use CBFT phones as a means to improve situational awareness by easily identifying and locating critical personnel and resources. Also, CBFT allows blue force assets to view other blue force assets.

Shortly after CBFT was deployed to the field, the release of the product prompted the need to provide a method for transporting tactical data from the Internet to the Coast Guard Data Network (CGDN+) for delivery to CWSS. C2CEN engineers brought this idea to fruition by developing External Data Collection Servers (EDCS). This set of servers interacts with CWSS using Advanced

Encryption Standard (AES) encrypted messaging via serialized Java objects. The EDCS essentially acts as collection point for all external data sources outside the Coast Guard firewall.

Web-Based COP (WebCOP)

The unclassified version of CG WebCOP is the second subsystem being engineered and added to CWSS. This CGDN+ version, WebCOP(U), provides COP applicable web services and a commercial GIS system for managing and viewing COP data. WebCOP(U) uses the core CWSS services for user account authentication and management, spatial services, and track management. WebCOP(U) is intended for all users and operators that require a tactical display for track and air data. It is essentially a web-based version of the COP and displays track data from CBFT, CBP AMOC, NOAA VMS, IRVMC and Automatic Identification System (AIS).

WebCOP(U) provides a web-based client to display tactical data on existing standard workstations and will not require any additional software installation. This CWSS subsystem includes the addition of Geographic Information System (GIS) services for tactical overlays

and track layers. Tactical overlays can be modified as additional requirements are implemented from other data sources. However, the overlays will initially contain local base maps, event layers and NOAA VMS data to include closed areas.

The WebCOP(U) architecture consumes services from enterprise GIS (E-GIS) and unclassified data from the Maritime Information Safety and Law Enforcement (MISLE) database and the Ships Arrival Notification System (SANS) database. Figure 2 is simply a screenshot of WebCOP(U) that shows a customized symbology for surface tracks from data sources and feeds, i.e., IRVMC. Geographic regions can be selected from the map overview in the left column or can be selected by Sector, District or Area. Figure 3 shows the Hover Tips box that is displayed when a contact is selected. The Hover Tips box contains vessel specific information pulled from MISLE, SANS, etc. Figure 4 is another screenshot that shows the type of track data being displayed.

The WebCOP(U) subsystem is composed of three major commercial off the shelf software components developed by ESRI, Incorporated. These components include the ArcGIS Server, ArcSDE technology and Tracking Server. The ArcGIS Server provides SOA based components and an application server to deliver COP data and services. The ArcSDE technology provides a database access engine to spatial data that is accessible by the

ArcGIS Server and Tracking Server. Tracking Server collects and sends real-time spatial data from many data sources and formats to GIS clients for a near real time display.

As implicitly described by the architecture, WebCOP(U) will essentially be a light weight viewer for users of COP data to increase their MDA picture. The full production is anticipated to be released to the field in June - July 2008.

Future Releases

C2CEN engineers are pioneering future developments in CWSS to enhance COP and WebCOP(U). One of these future products includes WebCOP(I). WebCOP(I) is an Internet browser-based viewer of the SBU COP and is scheduled to be released in late 2008. It will be available to all Coast Guard operators and users, other government agencies, Department of Defense (DoD) and Department of Homeland Security (DHS) port partners, and select civil and law enforcement authorities without the risk of inadvertent data disclosure. WebCOP(I) will operate like a typical Internet browser and will require minimal training for users and operators.

Summary

CWSS is creating an SOA environment for COP services. It provides an enterprise solution for tactical data sharing and management in the unclassified environment

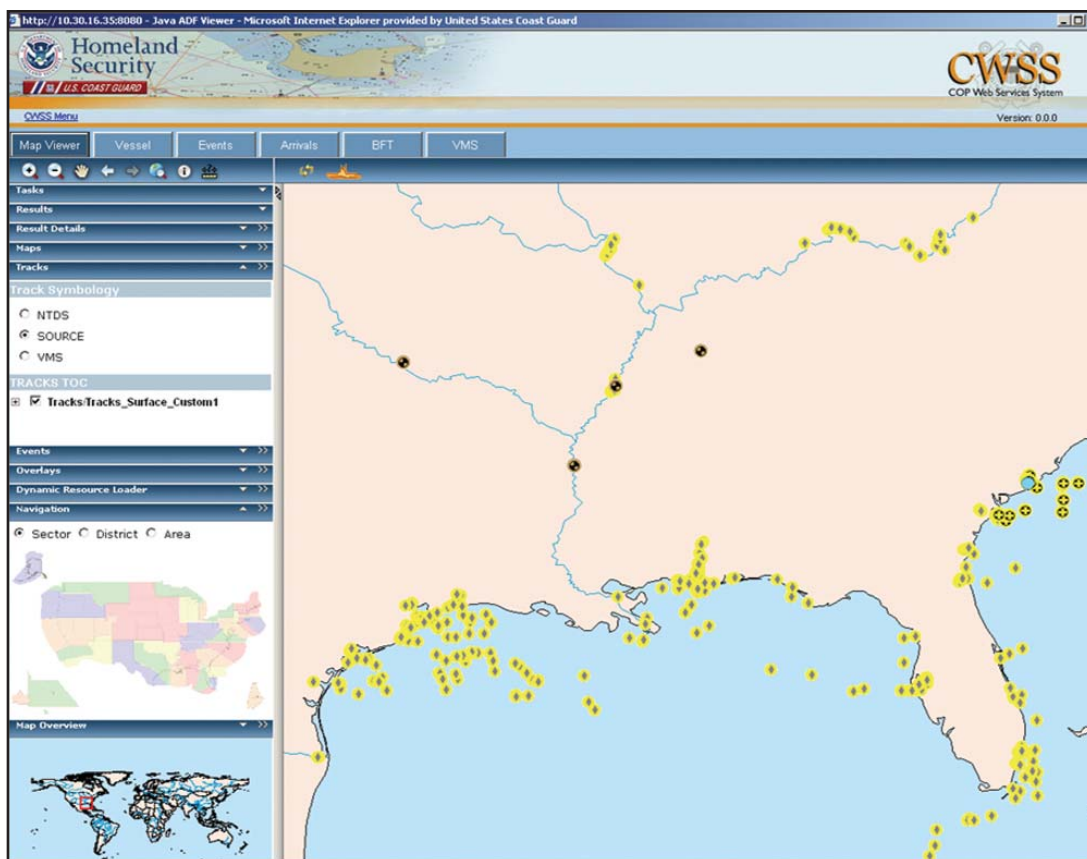


Figure 2. Screenshot of WebCOP(U).

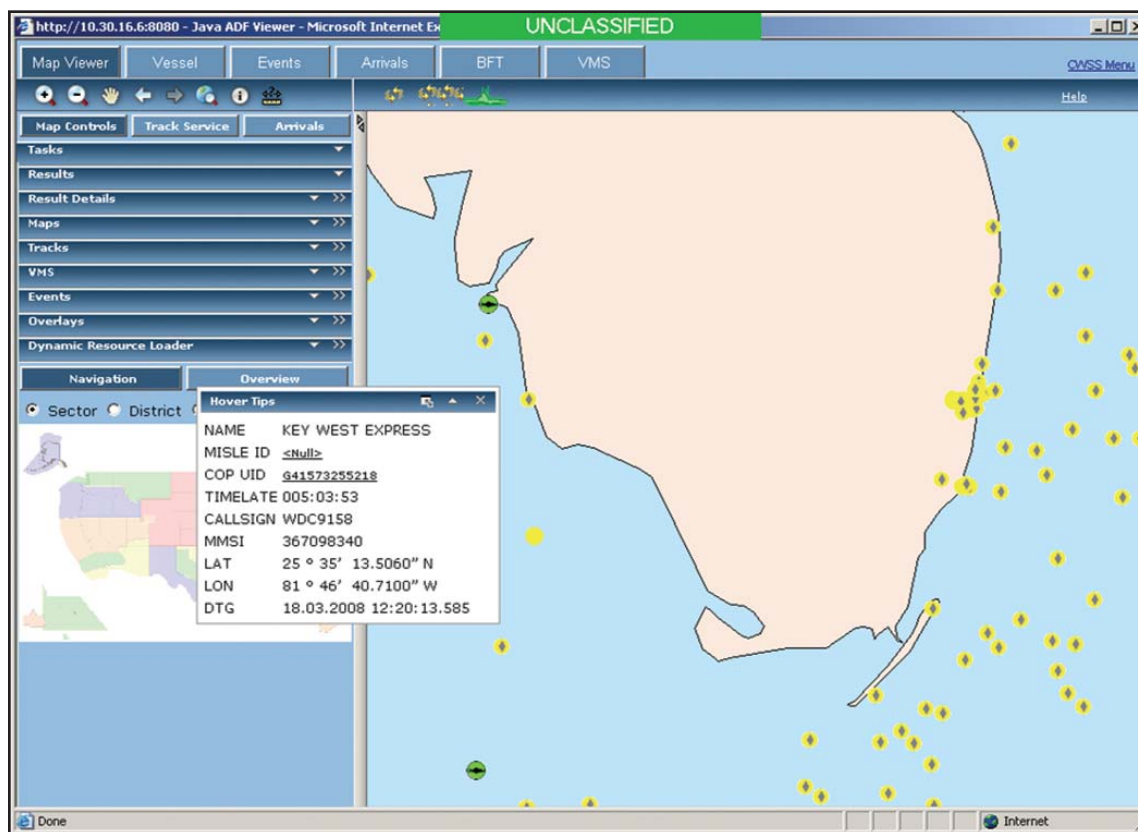


Figure 3. Display of vessel specific data contained in Hover Tips box. Surface contact becomes solid color when selected.

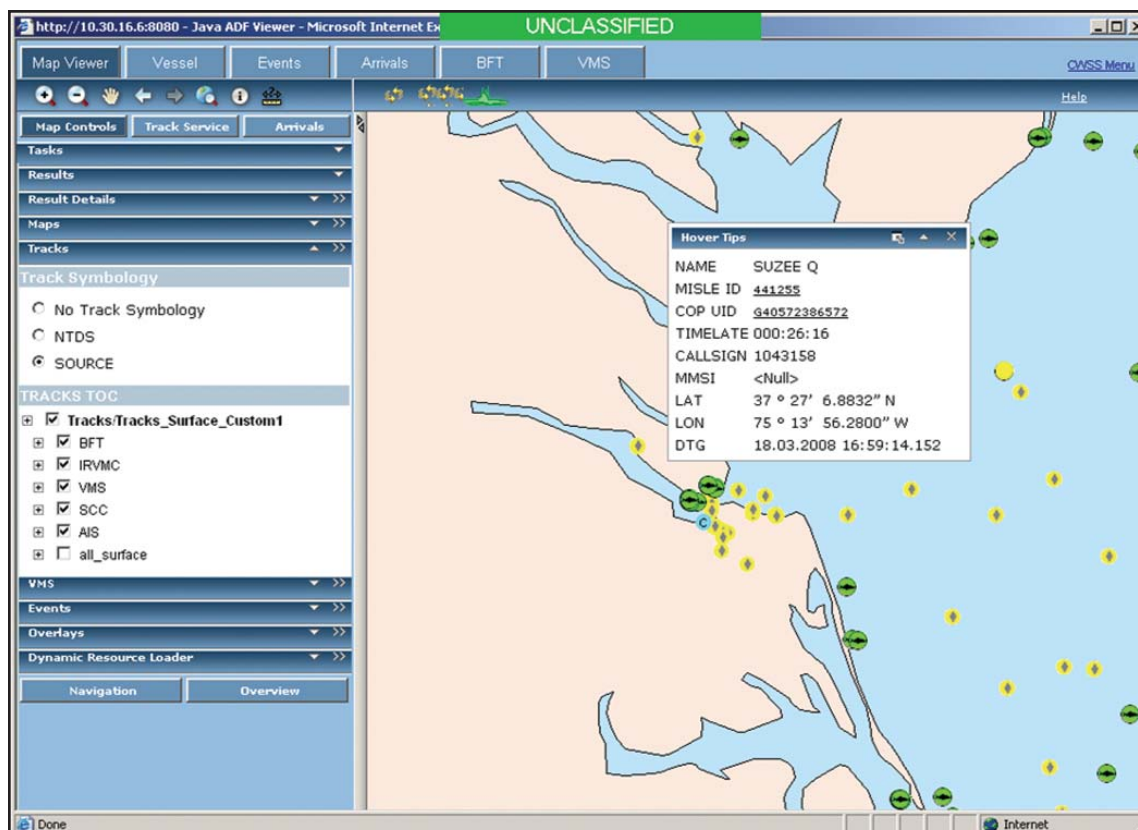


Figure 4. Left column shows the tracks that have been selected to be displayed (BFT, IRVMC, VMS, SCC, AIS).

and is a move towards centralized legacy C2 systems. This SOA environment for COP users is a means to eliminate the duplication of data between multiple information technology and C2 systems.

For additional information on these products and services, please contact:

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Coast Guard Upgrades With the Enhanced Mobile Incident Command Post

by LCDR Richard Sundland, CG-7612

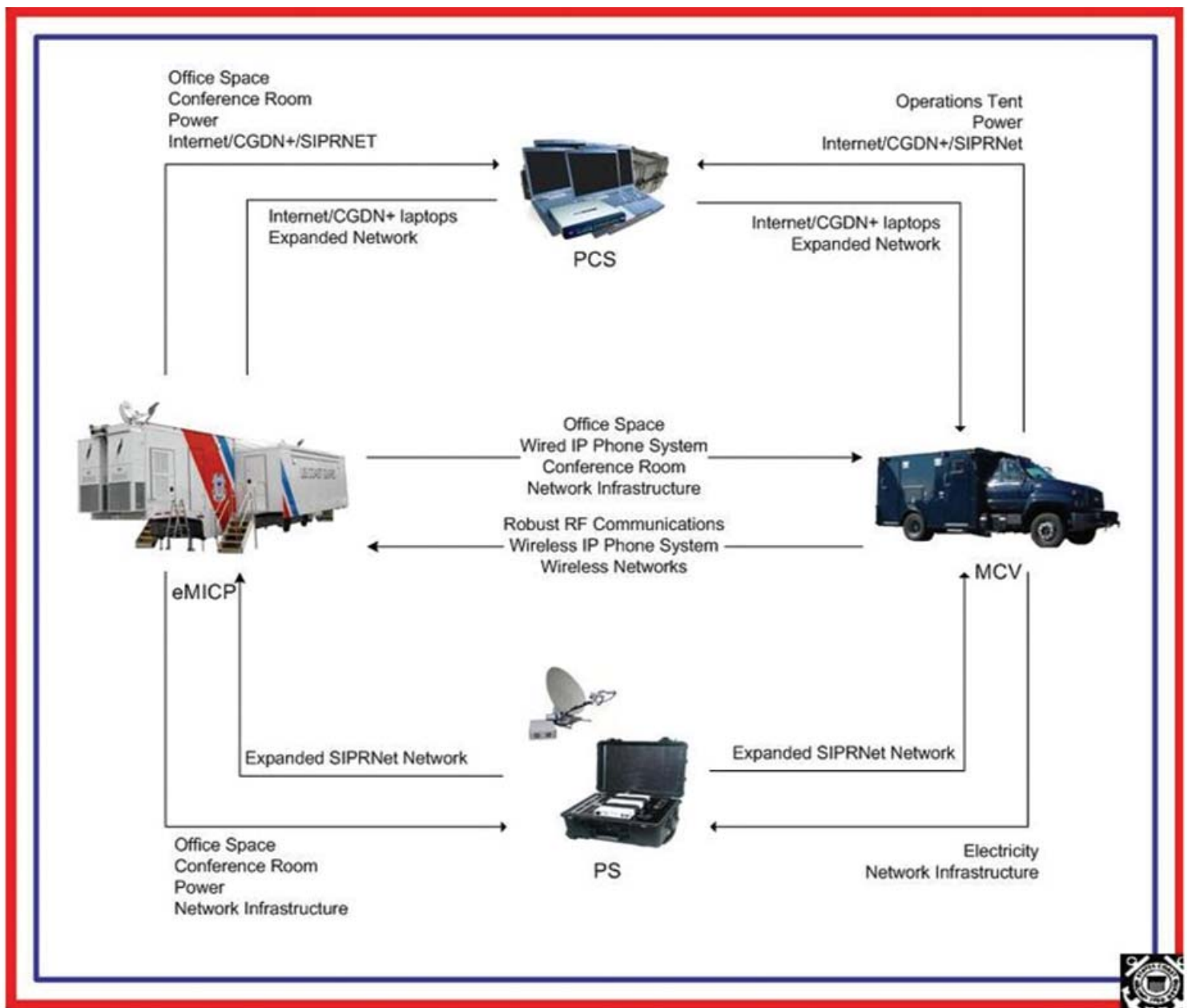
U.S. Coast Guard photo by Dan Bender.

The first of the Coast Guard's new enhanced Mobile Incident Command Posts (eMICP) is displayed outside of Coast Guard Headquarters in Washington, D.C., Nov. 26, 2007. The primary function of the eMICP is to provide sheltered work space, voice and data connectivity as well as command and control capabilities on a mobile platform. U.S. Coast Guard photo by Dan Bender.

Several recent large scale contingency response operations have highlighted the Coast Guard's need to modernize and enhance its mobile command, control, communications and computer (C4) equipment. The office of C4 and Sensor Capability assembled a team to plan, design and oversee the development of the Mobile Command Center (MCC) project. The MCC system is comprised of four subsystems: the Enhanced Mobile Incident Command Post (eMICP), Mobile Communications Vehicle (MCV), Portable Computer Store (PCS), and Portable SIPRNet (PS). The MCC system is designed to deliver a scalable solution that will provide remote, deployable, secure and non-secure self sustaining Command, Control, Communications, Computers and Information Technology (C4&IT) and sheltering capability during contingency, continuity and surge operations. The MCC subsystems can be dispatched independently or as a whole ranging from a simple augmentation of a computer network all the way to a full scale response requiring a command post with network support, SIPRNet, and short and long-range communications providing enhanced command, control, and situational awareness in a remote location.

The modular vision of the MCC system will make it capable of meeting specific demands of various Coast Guard Deployable Operations Group (DOG) units as well as shore based units. The system shall include "mobile" assets and "portable" components. The mobile assets are self-propelled or trailerable. The self propelled component, MCV, has a requirement to be transportable by Coast Guard C-130J, while still being able to meet state and federal highway regulations. The trailerable component, eMICP, meets all state and federal highway regulations and does not require permits for interstate travel. The portable equipment will be hand carried and plug-and-play compatible within these mobile assets. This article will focus on the eMICPs.





The Enhanced Mobile Incident Command Posts will be used to support on-scene command and control functions as well as provide a unified command space and a secure communications room. The eMICPs under the MCC project is a vast upgrade in capabilities compared to the Mobile Incident Command Posts (MICP) which are used primarily for contingency operations by the National Strike Force (NSF) teams. The eMICP provides more interoperability and combines all traditional radio and phone communications, network connectivity and administration features into one trailer, whereas the NSF's MICP act as a command post with phone connections.

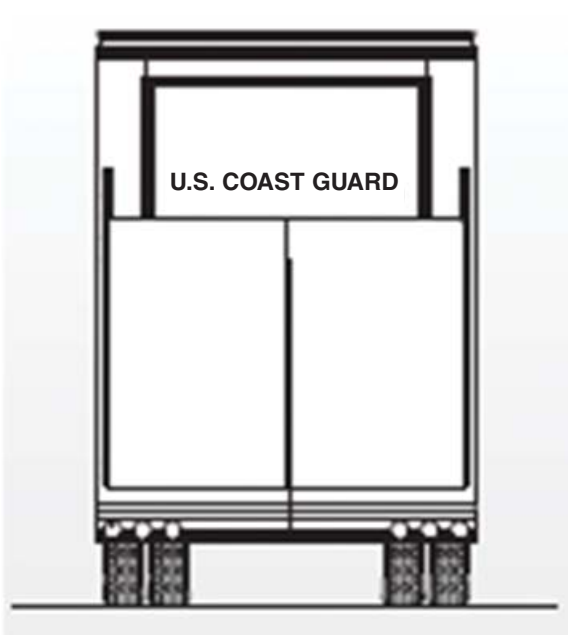
A 60 kW generator unit is mounted in the front of the trailer with a 120+ gallon diesel fuel tank and was tested at an 80% load for 90+ hours. When not using the generator, the eMICP can connect to nearby 110 Volt shore power. The trailer also has additional data connections for power, telephony and networks. There are three sections of the eMICP; the radio room, conference and computer room, and a foyer/entrance area referred to as the "mud room." The conference and computer room extend on both sides of the trailer by means of pop-outs and contain six workstations on each side. The eMICP has full internal climate control features but does not have running water or a sanitary facility. Two 5 ton HVAC units are mounted on the front of the trailer; one unit provides service for the radio room and the other for the conference and computer room.

General eMICP Description and Capabilities:

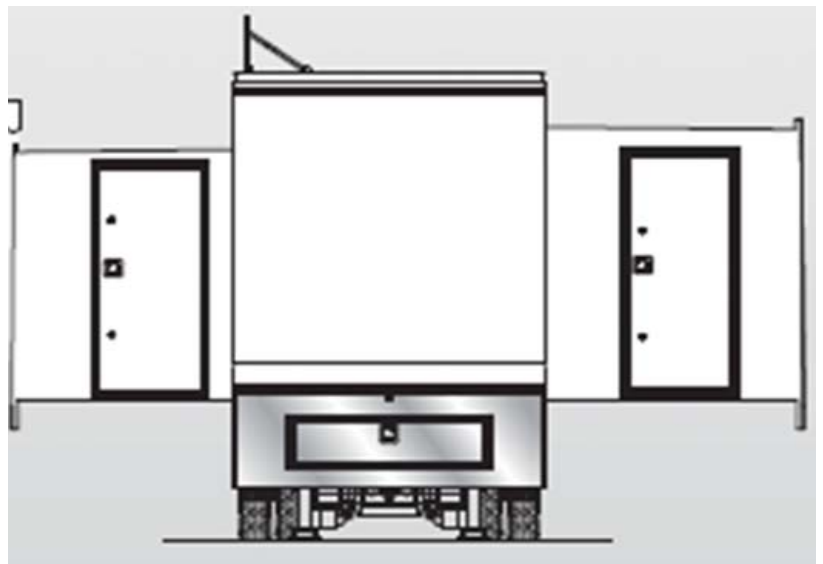
Length: 53 feet
Width: 102 inches
Height: 13 feet
Office space: 763 square feet
Number of Conference Room stations or seats: 20
Number of Secure work stations: 3



Side View of the eMICP



Rear View



Rear View with Sides Extended

<u>Radio</u>	<u>Telephony</u>
3 VHF circuits	8 concurrent incoming/outgoing calls
1 VHF/HUF/	20 installed IP Phones
MILSATCOM circuit	5 spare IP Phones (expansion)
1 HF circuit	3 STEs (secure voice)
Interoperability	1 Conference Phone
SBU and CLASS nets	2 Fax machines (1 secure and 1 un-secure)
<u>Network</u>	<u>Structural</u>
Satellite Internet (T1)	53 ft. trailer
Terrestrial (T1)	Generator
CGDN+	Satellite TV
SIPRNet	Security System
Printers	Foyer/Mud Room
SBU VTC	Conference Room
CLASS VTC	Office Space (12 positions)
	Secure Area
	Safe



Admiral Thad Allen listens to a briefing on the capabilities of the first of the Coast Guard's new enhanced Mobile Incident Command Posts (eMCP) outside of Coast Guard Headquarters in Washington, D.C., Nov. 26, 2007. U.S. Coast Guard photo by Dan Bender.



The siprnet satellite connection that allows for secure communications, part of the Coast Guard's new enhanced Mobile Incident Command Post (eMICEP), is displayed outside of Coast Guard Headquarters in Washington, D.C., Nov. 26. U.S. Coast Guard photo by Dan Bender.

The eMICEP will not only offer state-of-the-art conference and watch standing facilities, but will provide the most up-to-date communications capabilities. The communications suite includes VHF, UHF, HF, Coast Guard Data Network Plus, Military Satellite Communication, SIPRNet, Public Switched Telephone Network and an ACU-1000. The ACU-1000 will enable communications (radio, phone, wireless and satellite) to interface with a wide range of federal, state and local agencies.

The eMICEP has the following specialized antenna systems:

- ☐ Self-elevating mast: A self-elevating mast to support line-of-site (LOS) radio communications and sensors. The mast is built within the body of the trailer and does not protrude beyond the maximum trailer height when stowed.
- ☐ Two Self-aligning satellite dishes: One dedicated for two-way data communications and the other for voice communications. The satellite dishes are built within the body of the trailer and do not protrude beyond the maximum trailer height when stowed.
- ☐ Low-profile satellite antenna: A low-profile satellite TV antenna capable of receiving DBS (Direct TV, et al) and Government Educational Training Network (GETN) broadcasts.

Program's Timeline:

The detail design of the eMICEP was approved in November 2006 and the first of three eMICEP's was delivered in November 2007. TISCOM completed the installation of secure equipment along with extensive testing and evaluation of the Classified and Unclassified communications and delivered the eMICEP to Communications Area Master Station Atlantic in February 2008. The second eMICEP is scheduled to be delivered in late 2008 and the third in 2009. The Portable Computer Store was completed in June 2005, three Portable SIPRNETs were delivered in July 2007, and the Mobile Communications Vehicle is under development and scheduled to be delivered in November 2008.

Conclusion:

The MCC is a system of systems that provides the tools necessary to deliver a scalable response to contingency, continuity and surge operations. The eMICEP is one subsystem of the MCC system that provides a command post with radio, computer network and telephone communications enhancing command, control and situational awareness. 🇺🇸

WASHINGTON - Building upon solid past performance transferring retired cutters and a variety of small boats to allied nations, the Acquisition Directorate is building an even stronger Foreign Military Sales (FMS) program -- to better support government security assistance objectives and bolsters the presence of U.S. industry abroad.

The FMS and Excess Defense Articles (EDA) programs, resident in the Office of International Acquisition (CG-922), are important elements of the Coast Guard's security assistance function. The programs help achieve foreign policy and security goals through the sale and transfer to friendly governments U.S. platforms (ships and aircraft) and mission equipment.

Coast Guard Strengthens Foreign Military Sales Program

by Hunter C. Keeter, CG-925

The Coast Guard views FMS activity as 'cost-neutral' (foreign customers pay only the actual costs incurred, and excess funds are returned to the FMS customer). However, sales of platforms, equipment and services may benefit the Coast Guard by helping to drive down unit costs for ships and aircraft still in production. The FMS/EDA programs also benefit the U.S. economy by supporting production lines and jobs in industry.

Coast Guard FMS accounts for approximately \$21.5 million annually.

NICHE MARKET

While a relatively small concern compared with the FMS programs of the Department of Defense, the Coast Guard is building its enterprise into what Assistant Commandant for Acquisition, Rear Adm. Gary T. Blore, called a "niche market" for technologies that fulfill a unique set of mission requirements.



Ex-Coast Guard Cutter GENTIAN at anchor off Port-au-Prince, Haiti. On Oct. 15, 2007, the government approved the transfer of GENTIAN to the Armada Nacional de Colombia as part of the Coast Guard's security assistance program. (USCG photo by PA3 Cindy Marshall)

"There are only two or three navies in the world like the U.S. Navy; all others are more like the Coast Guard," Blore said during an interview. "So many foreign navies have an affinity with us because they tend to be less focused on global reach and more focused on the mission set that is like our own-maritime border security, law enforcement, search and rescue, environmental protection and national defense."

In the beginning the programs focused on transfer of used Coast Guard cutters and small boats. Since 1997, the Coast Guard has transferred more than 116 decommissioned vessels to 26 nations through EDA. The service has sold more than 91 new construction vessels to 12 nations through FMS. The programs also provide training, logistics and technical support to the platforms' new host nations.

The goal, according officials from the Acquisition Directorate, is to create a manageable program that is large enough to support Coast Guard and national policy objectives, while also providing a boost to American industry.

"FMS is finding its stride as more of a Coast Guard-unique element of selling U.S.-made products," Rear Adm. Blore said. "I think within the next two or three years, the niche market that we are building in Coast Guard FMS is going to develop branches and really expand its portfolio into a well-run unique division of our acquisition business. ... We are going to sell some new products that we have brought online, and that will help us in unit cost and it is going to be good for U.S. industry. Meanwhile, we can continue to sell small boats and used Coast Guard cutters as well."

EXPANDING CATALOGUE

The Coast Guard's FMS catalogue of products is expanding. As new assets arrive -- such as the HC-144A Ocean Sentry Maritime Patrol Aircraft and its mission system pallet, or the upgraded sensor suite aboard the HC-130J Hercules Long Range Surveillance aircraft -- the Coast Guard is planning ways of marketing these products as well.

The Coast Guard also has enjoyed significant improvement to its search and rescue capabilities with the aircraft-mounted Direction Finder 430 system, which began saving lives almost as soon as it was approved for operational use. The DF-430 system may soon be on offer for FMS.

Meanwhile, utility boat sales have proven to be a major FMS success for the Coast Guard. The service is selling a variety of types of small boats, which are being used in innovative ways by many customers,



*Response Boat-Medium (RB-M), U.S. Coast Guard
photo by Marinette Marine Corporation.*

OVERVIEW OF RECENT FMS CASES

Early 2008-Submitted for Department of Defense approval: potential sale of 11 Defender-class and 19 Arch Angel-class response boats to the Republic of Chile.

Nov. 8, 2007-In support of the *Cooperative Strategy for 21st Century Seapower*, sold to the Iraqi Navy 26 Fast Response Boats, spare parts, tools, training and other support valued at a total of \$8.3 million.

Oct. 15, 2007-Transferred to the Armada Nacional de Colombia the 180-foot ex-buoy tender *Gentian* valued at \$2.7 million, plus \$890,000 for navigation and communications equipment.



FOREIGN MILITARY SALES/EXCESS DEFENSE ARTICLES CATALOGUE

25-foot Defender-class Response Boat-Small (RB-S)
33-foot Special Purpose Craft-Law Enforcement (SPC-LE)
42-foot Arch Angel-class Fast Response Boat
Response Boat-Medium (RB-M)
Cutter Boat-Over the Horizon (CB-OTH)
Trailable Aids to Navigation Boat (TANB)
National Security Cutter (NSC)
HC-144A Ocean Sentry Maritime Patrol Aircraft (MPA)
HC-130J mission systems
Fast Response Cutter-B-class (FRC-B)
Offshore Patrol Cutter (OPC)
Medium and High Endurance Cutters

including the naval and maritime law enforcement forces of partners such as Nigeria and Iraq.

The Response Boat-Medium (RB-M) project is slated to begin Operational Test and Evaluation (OT&E) at Coast Guard Station Little Creek, Va. These utility boats will replace the service's fleet of 41-foot and other non-standard boats, and, once testing is completed, will provide a very capable platform for marketing through the FMS program.

Completing OT&E is an important step, not only because it marks an important transitional phase in an acquisition project -- certifying that the product is operationally suitable and effective -- but also because completing OT&E is an important signal to potential customers that the platform or system is ready for sale.

"We only sell what the admiral buys; so this year we have to get through OT&E for the National Security Cutter, the Maritime Patrol Aircraft, the HC-130J and the RB-M," said Joseph Shea, who works for the Office of International Acquisitions. "We are ... talking with international partners about their requirements and how our products could fulfill some of those."

TWO-WAY STREET

Many allied navies have duties that include maritime border patrol, illegal migrant interdiction, fisheries protection, piracy and other missions that are closely analogous to those of the U.S. Coast Guard.

Mission commonality helps to inform a potential overseas customer base for Coast Guard products, while at the same time providing a venue for the U.S. Coast Guard to benefit from cooperation and learn some helpful lessons of its own.

"This represents a huge opportunity to bring all the ocean-centric nations together and speak to them about how they are applying technology to the law enforcement, maritime security and national defense missions set," Blore said.

For example, Blore recently visited Australia where he met with that nation's acquisition officials and discussed common requirements for technologies to support naval and federal law enforcement requirements.

"Because we have a lot of commonality, we can really learn from one other," Blore said. "The

Australians showed us some of the innovative things they are doing with their navy patrol boats. Up on the bridge, for example, they have the captain, a conning officer and the engineer all sitting next to each other. That's not the way we run patrol boats in the U.S. Coast Guard but it is very interesting to see how the Australians do it and how that concept of operation is reflected in the design of the platforms."

Geography also provides some advantages for allies, enabling real-world testing of interesting hardware that would be problematic in some U.S. locations. For example, Australia's maritime border is less densely populated than the coastline of the United States, allowing more unrestricted airspace for testing Unmanned Aerial Systems (UASs), such as the RQ-1 Predator robot aircraft.

Internationally, General Atomics markets a variant of its Predator called the 'Mariner.' In September 2006, the Australian Defence Science and Technology Organisation (DSTO) tested Mariner during a 29-day exercise emulating operations against illegal fishing, smuggling and illegal immigration.

During the exercise the Royal Australian Air Force flew the Mariner for more than 75 hours at between 1,000 feet and 40,000 feet altitude. The UAS shared radar sensor data with Royal Australian Navy patrol boats to model operations of the Joint Offshore Protection Command.

Australia's naval and federal law enforcement organizations have experimented with the Predator in maritime surveillance mode. In the United States, such testing might interfere with the civil air traffic control system.



HC-144A Ocean Sentry, medium-range surveillance aircraft. USCG photo by PAC Sarah B. Foster.

"We gain valuable insights into how things worked for them," Blore said. "What worked well and what didn't work so well. The Australians and other partners can test and evaluate technologies and we can learn from that, and vice versa. That is a very important aspect of our relationship." 🌐

What's the Deal With MDE Parts?

by LT Chad Moore, MLC PAC(vr-2)



Coast Guard Cutter GALLATIN (WHEC 721). U.S. Coast Guard Cutter Photo.

WHECs have been experiencing a larger than normal amount of Main Diesel Engine (MDE) casualties spiraling into a full on Center Section Overhaul (CSO) within the last two years. This higher demand has severely stretched the normal supply chain.


Let's start with some basic background of the WHEC MDE. The manufacturer of the Model 38TD-8 1/8 is Fairbanks Morse Engine (FME) based out of Beloit, Wisconsin. Most of the Model 38 engines in industrial service are back-up isosynchronous generators in a naturally aspirated configuration that include surface and sub-surface naval ships and nuclear power plants. The Coast Guard (CG) is rather unique in the use of the Model 38 turbocharged version for main propulsion in today's world. Even the World War II submarines used the naturally aspirated version. The turbocharged model in the WHEC experience larger usage compared to other industrial applications. This corresponds to higher engine hours and varying dynamic load states because of the main propulsion configuration. Increased dynamic operations correlate to different distinct logistical supply demands that are exponentially greater.

Where do these parts come from? This is a much misunderstood concept. The ELC is not the sole source of CG parts. The CG depends on the stock system, original equipment manufacturers (OEM) and other non-OEM sources. The ELC only stocks parts unique to CG equipment which are not stocked by any other government agency. It does not make financial sense for the CG to dual manage parts that another agency manages. The CG, as an organization, depends on other govern-

ment stockpoints to meet its logistical needs for parts support.

The two other primary government agency stockpoints are the Defense Logistics Agency (DLA) (Source of Supply code (SOS) SMS), and the Naval Inventory Control Point Surface/Subsurface (SOS N35). Outside of the ELC, DLA handles the vast majority of our consumable parts needs with regard to Model 38TD-8 1/8 parts. ELC's core parts management are the engine accessory pumps that are free-issue mandatory turn-in repair items specific to CG use on the Model 38 engine.

Generally, when parts are not available in the stock system, type desk managers seek out parts procurement from OEM (FME) before seeking out non-OEM sources. With substantial vertical drive failures combined with engine block lifts and engine realignment, that occurring in Fiscal Year (FY) 2007, a more than normal demand on the part supply system was experienced. This not only drew down the stock system, but also severely depleted the on-hand stock of FME. There are business reasons why companies only keep a short list of parts on hand ranging from cost of managing inventory to tax implications. A company's stocking levels are inherently beyond the topic of this article. Due to the government not being able to depend on private suppliers' stock levels, the government maintains logistical stockpoints. Stockpoints do not have the same profit motive as private industry, but they still must cover the cost of logistical management. Their end goal is to maintain support for operations based on historical or known future demands. CG members are very good about submitting requisi-



tions and seeking out vendor supported parts. Seeking out vendors to meet our needs is a great skill, but if the government's stockpoints do not know about these external demands, then they do not have justification to stock the managed parts.

So how does the CG communicate to DLA the need to restock or raise inventory levels?

There are a few options to document this demand. Traditional methods include submitting MILSTRIP requisitions to the stockpoints based on the maintenance needs of the requesting unit. Stockpoints will either fill this order or place the request on backorder against due-in stock. Units can also submit fill/kill requisitions that require funding to be placed against the order. This option ties up limited funding and when the order is killed, the financial staff must engage in the time consuming reconciliation process. In the meantime, the requisitioner must now seek out the requested item commercially. In essence, this requires double procurement. FEDLOG is a rather static information tool as it gives primarily cost and SOS data. DLA recently launched a program called DOD-EMALL (www.emall.dla.mil). It provides a significantly deeper look into stock availability, due-in information, order history, unfilled orders, and a whole lot more other detailed logistical supply data.

As a type desk manager, DOD-EMALL is a powerful decision tool because it can immensely influence my procurement decisions. For example, should a CASREP or upcoming MDE CSO project be in progress, I can check parts availability. If none of the requested parts are available, then I can go commercial without having to submit a fill/kill requisition. I am now left in a dilemma because I now have purchased outside the stock system and the demand planners do not have a documented demand to restock.

So how do I document demand for restocking?


The major reason why I am such a champion about DOD-EMALL is that the CG can communicate demand to the demand planner at DLA without having to submit a requisition. Registered users can submit what is known as a "DHA-Demand." A DHA-Demand communicates to a demand planner that there is demand on a particular National Stock Number (NSN) and a requisitioner has had to go outside the stock system to procure an item. This information, along with other regular submitted

orders, will cause the stock managers to issue procurement requests to the vendors for restocking.

I highly recommend implementing the use of DOD-EMALL throughout the CG when ordering DLA normally stocked items commercially. Storekeeper staff should be normally checking to see if materials being purchased commercially are regularly stocked items. Adding the DHA-Demand submission step is an extra task, but has long-term gains for driving restock levels, reduce commercial purchases, avoid extra reconciliations, and eliminate the need for fill/kill requisitions which tie up limited funding.

In October 2007, I learned about DHA-Demand submissions, and begun using this process here at the (vr-2) type desk. Referring to records of commonly ordered DLA parts for the Model 38TD-8 1/8 engine, I have been diligent about my submission. Given procurement lag time and the recent draw down at FME, the stock system will not be backfilled right away. However, for long-term purposes, I am seeing active order placement based on my submissions. With the proper documenting of demand this effort should aid our ability to respond to CASREPS because of increased stocking levels and reduced contract administration lead time.

Beyond the use of DOD-EMALL, recent efforts here at the type desk include continuing to work with ELC(011) and (026), collating the WHEC engine hours to better predict future part demands. I would expect shortly to see some policy changes in the CSO procedures given parts logistics support. We are trying to develop a CSO consumable part kit that the ELC can manage. This would be pre-staged and include key consumable wear parts and would relieve the cutter of having to qualify parts for later usage. All parts in the kit would be automatically used. Traditional mandatory turn-in repairable items like the turbochargers, blowers and accessory pumps, would still be separately managed by the ELC. Individual consumable parts would continue to be managed by traditional stock points, but kit creation under one NSN is the goal.

For further information about implementing DOD-EMALL and a current viewpoint Fairbanks Morse Engine logistical supply support, I can be reached at chad.a.moore@uscg.mil or 510-637-5825. 

UNITED STATES COAST GUARD

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 - Implement shoreside Environmental Management Systems
- Increase biofuel use in its vehicle fleet by 15% over each of the next four years
- Ensure that 15% of new construction projects meet Leadership in Energy and Environmental Design standards

For More Information, Contact:

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